



NISTIR 5098

A Bibliography of Publications of the NIST Electromagnetic Technology Division

Sara Metz, Editor

**NIST**

National Institute of Standards and Technology
Technology Administration, U.S. Department of Commerce

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Electromagnetic Technology Division

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U.S. Department of Commerce
Norman Y. Mineta, Secretary

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National Institute of Standards and Technology
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A Bibliography of Publications of the NIST Electromagnetic Technology Division

Sara E. Metz, Editor
Electronics and Electrical Engineering Laboratory
National Institute of Standards and Technology
325 Broadway
Boulder, Colorado 80305

This bibliography lists the publications of the staff of the Electromagnetic Technology Division of NIST during the period from January 1970 through July 1999. The bibliography's main section, Cryoelectronic Metrology, lists citations in the following project areas: Josephson Array Development; Nanoscale Cryoelectronics; High-Performance Sensors, Infrared Detectors, and Mixers; and High-Tc Electronics. The most recent publications are listed first and arranged alphabetically by authors' names.

Key words: cryoelectronics; X-ray detectors; voltage standards; Josephson junctions; superconductivity

INTRODUCTION

The Electromagnetic Technology Division was formed during the reorganization of the National Bureau of Standards (now the National Institute of Standards and Technology) in April 1978 by combining parts of the former Electromagnetics and Cryogenics Divisions. It developed measurement methods and standards and provided metrological support for laser systems, optical communication equipment, cryoelectronics, magnetics, superconductors, and other unusual electrical engineering materials. Therefore, this bibliography covers the period beginning before the reorganization and includes at least the more recent origins of the present work of the division. In 1994, the Electromagnetic Technology Division was divided into two divisions: the Electromagnetic Technology Division, which now includes projects in areas of cryoelectronics metrology and superconductor and magnetic measurement, and the Optoelectronics Division, which encompasses projects in the former optoelectronics group.

In 2000, the Electromagnetic Technology Division was divided again: the Division's projects now focus on metrological applications of cold electronics, while the new Magnetics Group was formed from those projects that deal with bulk superconductors and magnetic measurements. This Bibliography contains the publications of the Division as it is organized now.

Other information sources may be useful to the reader who is interested in NIST activities connected with electromagnetic metrology. Two companion bibliographies, NISTIR 5098 and NISTIR 5099, list publications of the Radio-Frequency Technology Division and the Optoelectronics Division for the same period. Similarly, the newly-formed Magnetics Group has published its own bibliography, NISTIR 6600. An excellent summary of the whole field of electromagnetic metrology as it stood in 1967 was published as a special issue of the Proceedings of the IEEE (volume 55, June 1967). Advances in the following decades were described in two other special issues of the same journal (volume 66, April 1978, and volume 74, January 1986).

A Note on Abbreviations

NOTE: On August 23, 1988, the National Bureau of Standards (NBS) became the National Institute of Standards and Technology (NIST); therefore, documents with either prefix are considered NIST publications.

Most readers are familiar with the commonly used abbreviations for the names of the professional journals that appear in this bibliography. Some publication series are peculiar to NIST and may call for explanation. They are:

NIST IR - NIST Interagency/Internal Report	NBS IR - NBS Interagency/Internal Report
NIST TN - NIST Technical Note	NBS TN - NBS Technical Note
NIST SP - NIST Special Publication	NBS SP - NBS Special Publication
NIST HB - NIST Handbook	NBS HB - NBS Handbook
NIST JRES - NIST Journal of Research	NBS JRES - NBS Journal of Research
NIST MN - NIST Monograph	NBS MN - NBS Monograph

Purchase Procedures and Document Availability

NIST (NBS) Technical Notes, Special Publications, Handbooks, Journals of Research, and Monographs may be purchased from the U.S. Government Printing Office (GPO) at the following address: New Orders, Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. . The GPO website is at <http://www.access.gpo.gov/> and the order desk phone number is 202-512-1800. Orders may be paid by major credit card, or check or money order payable in U.S. dollars to the Superintendent of Documents. The Government Printing Office usually stocks these publications for a maximum of two years, after which they may be purchased from the National Technical Information Service (NTIS), Springfield, VA 22161. The NTIS website for information and ordering is at <http://www.ntis.gov>. The phone number for ordering is 703-487-4650.

Reprints of papers published in non-NIST media may be available in limited quantities from the authors.

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A large part of the labor of preparing a bibliography is spent collecting and arranging the material; Lisa Eldrige and Edie DeWeese assisted with these tasks. The main sources of material were the NIST Boulder Editorial Review Board's database, the National Technical Information Service, and information supplied by individual authors. I also thank each author for helping me keep our material up-to-date.

CITATIONS

- Performance of Multiplexed SQUID Readout for Cryogenic Sensor Arrays;
Chervenak, J.A.; Grossman, E.N.; Irwin, K.D.; Martinis, J.M.; Reintsema, C.D.; Allen, C.A.;
Bergman, D.I.; Moseley, S.H.; Shafer, R.
Nucl. Instrum. Methods, in Phys. Res. A 444(2000): 107-110; 2000.
- The Approaching Revolution in X-ray Microanalysis: The Microcalorimeter Energy Dispersive Spectrometer;
Newbury, D.E.; Wollman, D.A.; Hilton, G.C.; Irwin, K.D.; Bergren, N.F.; Rudman, D.A.; Martinis,
J.M.
J. Radioanalytical Nucl. Chem. 244(3): 627-635; 2000.
- Frequency Dependence of a Cryogenic Capacitor Measured Using Single Electron Tunneling Devices;
Eichenberger, A.L.; Keller, M.W.; Martinis, J.M.; Zimmerman, N.M.
J. Low Temp. Phys. 188(5/6): 317-324; 2000.
- Superconducting Transition-Edge-Microcalorimeter X-ray Spectrometer with 2 eV Energy Resolution at 1.5 keV;
Wollman, D.A.; Nam, S.W.; Newbury, D.E.; Hilton, G.C.; Irwin, K.D.; Bergren, N.F.; Deiker, S.;
Rudman, D.A.; Martinis, J.M.
Nucl. Instrum. Methods, in Phys. Res. A 444(2000): 145-150; 2000.
- Microcalorimeter EDS for Low Voltage Microanalysis;
Wollman, D.A.; Newbury, D.E.; Hilton, G.C.; Irwin, K.D.; Rudman, D.A.; Deiker, S.; Bergren, N.F.;
Martinis, J.M.
Inst. Phys. Conf. Serv. 165: Symp. 2: 125-126; 2000.
- Calculation of T_c in a Normal-Superconductor Bilayer Using the Microscopic-Based Usadel Theory;
Martinis, J.M.; Hilton, G.C.; Irwin, K.D.; Wollman, D.A.
Nucl. Instrum. Methods, in Phys. Res. A 444(2000): 23-27; 2000.
- A Mo-Cu Superconducting Transition-Edge Microcalorimeter with 4.5 eV Energy Resolution at 6 keV;
Irwin, K.D.; Hilton, G.C.; Martinis, J.M.; Deiker, S.; Bergren, N.F.; Nam, S.W.; Rudman, D.A.;
Wollman, D.A.
Nucl. Instrum. Methods, in Phys. Res. A 444(2000): 184-187; 2000.
- Sub-dekahertz Ultraviolet Spectroscopy of $^{199}\text{Hg}^+$;
Rafac, R.J.; Young, B.C.; Beall, J.A.; Itano, W.M.; Wineland, D.J.; Bergquist, J.C.
Phys. Rev. Lett. 15(12): 2462-2465; Sept. 18, 2000.
- A Digital Readout Scheme for Arrays of Microcalorimeter X-ray Detectors;
Nam, S.; Wollman, D.A.; Hilton, G.C.; Chervenak, J.; Deiker, S.; Irwin, K.D.; Martinis, J.M.
Proc., Microscopy and Microanal. 2000, Philadelphia, PA: 742-743; Aug 2000.
- Microcalorimeter EDS: Benefits and Drawbacks;
Wollman, D.A.; Newbury, D.E.; Nam, S.W.; Hilton, G.C.; Irwin, K.D.; Rudman, D.A.; Deiker, S.;
Bergren, N.F.; Martinis, J.M.
Proc., Microscopy and Microanal. 2000, Philadelphia, PA: 738-739; Aug 2000.
- Comparison of Elemental Detection Using Microcalorimetry, SIMS, AES and EDS (SEM, STEM, and TEM);
Vartuli, C.B.; Stevie, F.A.; Wollman, D.A.; Antonell, M.; Irwin, R.B.; McKinley, J.M.; Shofner, T.L.;
Purcell, B.M.; Anderson, S.A.; To, B.
Proc., Microscopy and Microanal. 2000, Philadelphia, PA: 128-129; Aug 2000.

- Low Harmonic Distortion in a Josephson Arbitrary Waveform Synthesizer;
Benz, S.P.; Burroughs, C.J.; Dresselhaus, P.D.
Appl. Phys. Lett. 77(7): 1014-1016; Aug 2000.
- Nanotechnology for Next-Generation Josephson Voltage Standards;
Benz, S.P.; Dresselhaus, P.D.; Burroughs, C.J.
Proc., Symp. on Microtechnology in Metrology and Metrology in Microsystems, Delft, The Netherlands: 127-132; Aug 2000.
- Microcalorimeter Energy-Dispersive Spectrometry Using a Low Voltage Scanning Electron Microscope;
Wollman, D.A.; Nam, S.W.; Hilton, G.C.; Irwin, K.D.; Bergren, N.F.; Rudman, D.A.; Martinis, J.M.; Newbury, D.E.
J. Microscopy 199(1): 37-44; Jul 2000.
- Dynamic Input Capacitance of Single-Electron Transistors and the Effect on Charge-Sensitive Electrometers;
Zimmerman, N.M.; Keller, M.W.
J. Appl. Phys. 87(12): 8570-8574; Jun. 15, 2000.
- Exclusion Limits on the WIMP-Nucleon Cross Section from the Cryogenic Dark Matter Search;
Abusadi, R.; Akerib, D.S.; Barnes Jr., P.D.; Bauer, D.A.; Bolozdynya, A.; Brink, P.L.; Bunker, R.; Cabrera, B.; Caldwell, D.O.; Castle, J.P.; Clarke, R.M.; Colling, P.; Crisler, M.B.; Cummings, A.; Da Silva, A.; Davies, A.K.; Dixon, R.; Dougherty, B.L.; Driscoll, D.; Eichblatt, S.; Emes, J.; Gaitskell, R.J.; Golwala, S.R.; Hale, D.; Haller, E.E.; Hellmig, J.; Huber, M.E.; Irwin, K.D.; Jochum, J.; Lipschultz, F.P.; Lu, A.; Mandic, V.; Martinis, J.M.; Nam, S.W.; Nelson, H.; Neuhauser, B.; Penn, M.J.; Perera, T.A.; Perillo Isaac, M.C.; Pritychenko, B.; Ross, R.R.; Saab, T.; Sadoulet, B.; Schnee, R.W.; Seitz, D.N.; Shestopole, P.; Shutt, T.; Smith, A.; Smith, G.W.; Sonnenschein, A.H.; Spadafora, A.L.; Stockwell, W.; Taylor, J.D.; White, S.; Yellin, S.; Young, B.A.
Phys. Rev. Lett. 84(25): 5699-5701; Jun 2000.
- Photon-Assisted Tunneling in Electron Pumps;
Covington, M.; Keller, M.W.; Kautz, R.L.; Martinis, J.M.
Phys. Rev. Lett. 84(22): 5192-5195; May 29, 2000.
- Improvements in the NIST Cryogenic Thermal Transfer Standard;
Lipe, T.E.; Kinard, J.R.; Reintsema, C.D.
Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 24-25; May 2000.
- A Capacitance Standard Based on Counting Electrons;
Keller, M.W.; Zimmerman, N.M.; Eichenberger, A.L.; Martinis, J.M.
Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 317-318; May 2000.
- DC Voltage Synthesis Using a Pulse-Quantized Josephson Voltage Source;
Benz, S.P.; Christian, L.A.; Burroughs, C.J.; Hamilton, C.A.
Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 339-340; May 2000.
- 1 Volt Josephson Fast Reversed DC Source;
Burroughs, C.J.; Benz, S.P.; Harvey, T.E.; Sasaki, H.
Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 341-342; May 2000.
- Superconducting Transition-Edge Bolometer Arrays for Ultra-Low Power Radiometry;
Grossman, E.N.; Chervenak, J.A.; Irwin, K.D.; Reintsema, C.D.
Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 349-350; May 2000.

- Comparison Between the SNS and SIS Josephson Voltage Standards at NIST;
 Jeanneret, B.; Rufenacht, A.; Burroughs, C.J.
 Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 389-390; May 2000.
- Measurement of the Frequency Dependence of a Single-Electron Tunneling Capacitance Standard;
 Eichenberger, A.L.; Keller, M.W.; Martinis, J.M.; Zimmerman, N.M.
 Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 16-17; May 2000.
- A High-Temperature Superconducting Transmission Line For Cryogenic Electrical Metrology Applications;
 Reintsema, C.D.; Kinard, J.R.; Lipe, T.E.
 Proc., Conf. on Precision Electromag. Meas. (CPEM), Sydney, Australia: 488-489; May 2000.
- Spectral Transmittance of Lossy Printed Resonant-Grid Terahertz Bandpass Filters;
 MacDonald, M.E.; Alexanian, A.; York, R.A.; Popovic, Z.; Grossman, E.N.
 IEEE Trans. Appl. Supercond. 48(4): 712-717; Apr 2000.
- Large-Area $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Bolometers on Si Substrates;
 Vale, L.R.; Ono, R.H.; McDonald, D.G.; Phelan, R.J.
 Supercond. Sci. Tech. 12: 856-858; 1999.
- Coplanar Transmission Lines with Meandering Center Conductors in Y-Ba-Cu-O/Au Bilayers;
 Weber, C.; Ono, R.H.; Booth, J.C.; Vale, L.R.; Benz, S.P.; Klushin, A.M.; Kohlstedt, H.; Buchal, C.; Semerad, R.
 Supercond. Sci. Tech. 12: 998-1000; 1999.
- Predicting Nonlinear Effects in Superconducting Microwave Transmission Lines from Mutual Inductance Measurements;
 Booth, J.C.; Vale, L.R.; Ono, R.H.; Claassen, J.H.
 Supercond. Sci. Tech. 12: 711-713; 1999.
- Lowering the Limit of Detection in High Spatial Resolution Electron Beam Microanalysis with the Microcalorimeter Energy Dispersive X-ray Spectrometer;
 Newbury, D.E.; Wollman, D.A.; Irwin, K.D.; Hilton, G.C.; Martinis, J.M.
 Ultramicroscopy 78: 73-88; 1999.
- Evaluating the Uncertainty of Josephson Voltage Standards;
 Hamilton, C.A.; Tang, Y.H.
 Metrologia 36: 53-58; 1999.
- Using Chaos to Generate White Noise;
 Kautz, R.L.
 J. Appl. Phys. 86(10): 5794-5800; 1999.
- Far-Infrared Transmittance and Reflectance of $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Films on Si Substrates;
 Kumar, A.R.; Zhang, Z.M.; Boychev, V.A.; Tanner, D.B.; Vale, L.R.; Rudman, D.A.
 Trans. ASME 121: 844-851; 1999.
- A Capacitance Standard Based on Counting Electrons;
 Keller, M.W.; Eichenberger, A.L.; Martinis, J.M.; Zimmerman, N.M.
 Science 285: 1706-1709; Sep 1999.

- Leakage and Counting Errors in a Seven-junction Electron Pump;
Kautz, R.L.; Keller, M.W.; Martinis, J.M.
Phys. Rev. B 60(11): 8199-8212; Sep 1999.
- Quantum Calorimetry;
Stahle, C.K.; McCammon, D.; Irwin, K.D.
Physics Today, Part 1: 32-37; Aug 1999.
- First Astronomical Application of a Cryogenic Transition Edge Sensor Spectrophotometer;
Romani, R.W.; Miller, A.J.; Cabrera, B.; Figueroa-Feliciano, E.; Nam, S.W.
Astrophys. J. 521: L153-L156; 1999.
- Geometry Dependence of Nonlinear Effects in High Temperature Superconducting Transmission Lines at Microwave Frequencies;
Booth, J.C.; Beall, J.A.; Rudman, D.A.; Vale, L.R.; Ono, R.H.
J. Appl. Phys. 86 (2): 1020-1027; Jul 1999.
- Cryogenic Microcalorimeters for X-Ray Microanalysis;
Wollman, D.A.; Hilton, G.C.; Irwin, K.D.; Bergren, N.F.; Rudman, D.A.; Newbury, D.E.; Martinis, J.M.
Proc., 1999 National Conf. of Standards Laboratories (NCSL) Workshop and Symp. Charlotte, NC: 811-819; Jul 1999.
- Interactions Between Bicrystal Josephson Junctions in a Multilayer Structure;
Li, H.Q.; Ono, R.H.; Vale, L.R.; Rudman, D.A.; Liou, S.H.
IEEE Trans. Appl. Supercond. 9(2): 3417-3420; Jun 1999.
- Comparison of Microwave and Mutual Inductance Measurements of the Inductive Nonlinearity of HTS Thin Films;
Claassen, J.H.; Booth, J.C.; Beall, J.A.; Vale, L.R.; Rudman, D.A.; Ono, R.H.
Ext. Abstracts, 7th Intl. Superconductive Electronics Conf. (SEC), Berkeley, CA: 77-79; Jun 1999.
- Role of Oxygen Pressure during Deposition on the Microwave Properties of YBCO Films;
Rudman, D.A.; Stork, F.J.B.; Booth, J.C.; Juang, J.Y.; Vale, L.R.; Beatty, G.J.; Williams, C.I.; Beall, J.A.; Ono, R.H.; Qadri, S.B.; Osofsky, M.S.; Skelton, E.F.; Claassen, J.H.; Gibson, G.; MacManus-Driscoll, J.L.; Malde, N.; Cohen, L.F.
IEEE Trans. Appl. Supercond. 9(2): 2460-2464; Jun 1999.
- Superconducting Transition-Edge Microcalorimeters for X-Ray Microanalysis;
Hilton, G.C.; Wollman, D.A.; Irwin, K.D.; Dulcie, L.L.; Bergren, N.F.; Martinis, J.M.
IEEE Trans. Appl. Supercond. 9(2) 3177-3181; Jun 1999.
- Superconducting Thin-Film Transformers at Microwave Frequencies;
Miklich, A.H.; Przybysz, J.X.; Smith, T.J.; Benz, S.P.; Harvey, T.E.
IEEE Trans. Appl. Supercond. 9(2): 3062-3065; Jun 1999.
- Large Area $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Bolometers on Si Substrates;
Vale, L.R.; Ono, R.H.; McDonald, D.G.; Phelan, R.J.
Proc., 7th Intl. Superconductive Electronics Conf., Berkeley, CA: 219-221; Jun 1999.

Nonlinear Inductive Response of High Temperature Superconducting Films Measured by the Mutual Inductance Technique;

Claassen, J.H.; Booth, J.C.; Beall, J.A.; Rudman, D.A.; Vale, L.R.; Ono, R.H.
Appl. Phys. Lett. 74 (26): 4023-4025; Jun 1999.

Operating Margins for a Superconducting Voltage Waveform Synthesizer;

Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.
Proc., 7th Intl. Superconductive Electronics Conf. (ISEC), Berkeley, CA: 115-117; Jun 1999.

Superconducting Multiplexer for Arrays of Transition Edge Sensors;

Chervenak, J.; Irwin, K.; Grossman, E.; Martinis, J.; Reintsema, C.; Huber, M.
Appl. Phys. Lett. 74(26): 4043-4045; 2000.

Passivation, Transition Width, and Noise for YBCO Bolometers on Silicon;

McDonald, D.G.; Phelan, Jr., R.J.; Vale, L.R.; Ono, R.H.; Rudman, D.A.
IEEE Trans. Appl. Supercond. 9(2): 4471-4474; Jun 1999.

Optimum Characteristics of High Temperature Josephson Junctions for "Lumped" Array Applications;

Ono, R.H.; Benz, S.P.
Proc., 7th Intl. Superconductive Electronics Conf. (ISEC), Berkeley, CA: 301-303; Jun 1999.

1 Volt DC Programmable Josephson Voltage Standard;

Burroughs, C.J.; Benz, S.P.; Harvey, T.E.; Hamilton, C.A.
IEEE Trans. Appl. Supercond. 9(2): 4145-4148; Jun 1999.

Conductor Loss in Superconducting Planar Structures: Calculations and Measurements;

Booth, J.C.; Holloway, C.L.
IEEE Trans. Microwave Theory Tech. 47 (6): 769-773; Jun 1999.

Coplanar Transmission Lines with Meandering Center Conductors in Y-Ba-Cu-O/Au Bilayers;

Weber, C.; Ono, R.H.; Booth, J.C.; Vale, L.; Benz, S.; Klushin, A.M.; Kohlstedt, H.; Semerad, R.
Proc., 7th Intl. Superconductive Electronics Conf. (ISEC), Berkeley, CA: 467-469; Jun 1999.

Predicting Nonlinear Effects in Superconducting Microwave Transmission Lines from Mutual Inductance Measurements;

Booth, J.C.; Vale, L.R.; Ono, R.H.; Claassen, J.H.
Ext. Abstracts, 7th Intl. Superconductive Electronics Conf. (SEC), Berkeley, CA: 74-76; Jun 1999.

Simultaneous Optimization of Linear and Nonlinear Microwave Response of YBCO Films;

Booth, J.C.; Beall, J.A.; Rudman, D.A.; Vale, L.R.; Ono, R.H.; Holloway, C.L.; Qadri, S.B.; Osofsky, M.S.; Skelton, E.F.; Claassen, J.H.; Gibson, G.; MacManus-Driscoll, J.L.; Malde, N.; Cohen, L.F.
IEEE Trans. Appl. Supercond. 9(2): 4176-4180; Jun 1999.

Distributed Nonlinear Effects in Planar Transmission Lines;

Booth, J.C.; Beall, J.A.; Vale, L.R.; Ono, R.H.
Digest, 53rd Automatic RF Techniques Group Conf., Anaheim, CA, 31-40; Jun 1999.

Third Harmonics Generation from Y-Ba-Cu-O Bicrystal Josephson Junctions in Coplanar Waveguides;

Shimakage, H.; Booth, J.C.; Vale, L.R.; Ono, R.H.
Ext. Abstracts, 7th Intl. Superconductive Electronics Conf. (SEC), Berkeley, CA: 191-193; Jun 1999.

- Long Term Stability of YBCO-Based Josephson Junctions;
Vale, L.R.; Ono, R.H.; Talvacchio, J.; Forrester, M.G.; Hunt, B.D.; DiIorio, M.S.; Yang, K-Y.; Yoshizumi, S.
IEEE Trans. Appl. Supercond. 9(2): 3383-3385; Jun 1999.
- Operating Conditions for a Pulse-Quantized AC and DC Bipolar Voltage Source;
Benz, S.P.; Burroughs, C.J.; Harvey, T.E.; Hamilton, C.A.
IEEE Trans. Appl. Supercond. 9(2): 3306-3309; Jun 1999.
- Programmable 1 V DC Voltage Standard;
Burroughs, C.J.; Benz, S.P.; Hamilton, C.A.; Harvey, T.E.
IEEE Trans. Instrum. Meas. 48(2): 279-281; Apr 1999.
- Thermoelectric Transfer Difference of Thermal Converters Measured with a Josephson Source;
Burroughs, C.J.; Benz, S.P.; Hamilton, C.A.; Harvey, T.E.; Kinard, J.R.; Lipe, T.E.; Sasaki, H.
IEEE Trans. Instrum. Meas. 48(2): 282-284; Apr 1999.
- AC and DC Bipolar Voltage Source Using Quantized Pulses;
Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Harvey, T.E.
IEEE Trans. Instrum. Meas. 48 (2): 266-269; Apr 1999.
- $^{199}\text{Hg}^+$ Optical Frequency Standard: Progress Report;
Rafac, R.J.; Young, B.C.; Cruz, F.C.; Beall, J.A.; Bergquist, J.C.; Itano, W.M.; Wineland, D.J.
Proc., 1999 Joint Mtg. Euro. Freq. and Time Forum and IEEE Intl. Freq. Control Symp., vol. 2, 4/13-4/16/99, Besançon, France: 676-681; Apr 1999.
- Deployment of a Compact, Transportable, Fully Automated Josephson Voltage Standard;
Kupferman, S.L.; Hamilton, C.A.
IEEE Trans. Instrum. Meas. 48(2): 249-252; Apr 1999.
- Chaos;
Kautz, R.L.
The CRC Handbook of Mechanical Engineering, Kreith, F., ed., CRC Press, Boca Raton, FL: 125-133; 1998.
- Lithographic Dipole Antenna Properties at 10 μm Wavelength: Comparison of Method-of-Moments Predictions with Experiment;
Grossman, E.N.; Koch, J.A.; Reintsema, C.D.; Green, A.
Intl. J. Infrared Millimeter Waves 19(6): 817-825; 1998.
- The Fourth Interlaboratory Comparison of 10 V Josephson Voltage Standards in North America;
Wang, C.M.; Hamilton, C.A.
Metrologia 35: 33-40; 1998.
- Multilayer Processing of High- T_c Films and Stacked Bicrystal Josephson Junctions;
Li, H.Q.; Ono, R.H.; Rudman, D.A.; Vale, L.R.; Liou, S.H.
Appl. Supercond. 6(10-12): 711-717; 1998.
- Microwave Power Handling in Engineered YBCO Grain Boundaries;
Habib, Y.M.; Oates, D.E.; Dresselhaus, G.; Dresselhaus, M.S.; Vale, L.R.; Ono, R.H.
Appl. Phys. Lett. 73(15): 2200-2202; Oct. 12, 1998.

- Application of Microcalorimeter EDS X-Ray Detectors to Particle Analysis;
 Diebold, A.C.; Wollman, D.A.; Irwin, K.D.; Martinis, J.M.; Liu, B.Y.H.
 Proc., Fourth Intl. Symp. on Ultra Clean Processing of Silicon Surfaces (UCPSS'98), Ostend,
 Belgium: 199-202; Sep 1998.
- A Bibliography of Publications of the NIST Electromagnetic Technology Division;
 Bradford, A.G., ed.
 NIST IR 5076, 91 pp; Sep 1998.
- Microcalorimeter EDS with 3 eV Energy Resolution;
 Wollman, D.A.; Irwin, K.D.; Hilton, G.C.; Dulcie, L.L.; Bergren, N.F.; Newbury, D.E.; Martinis,
 J.M.
 Proc., 14th Intl. Congress on Electron Microscopy, Cancun, Mexico: 573-574; Aug 1998.
- Microcalorimeter EDS Measurements of Chemical Shifts in Fe Compounds;
 Wollman, D.A.; Newbury, D.E.; Hilton, G.C.; Irwin, K.D.; Dulcie, L.L.; Bergren, N.F.; Martinis,
 J.M.
 Proc., Microscopy and Microanalysis Conf., Atlanta, GA: 196-197; Jul 1998.
- Thermoelectric Transfer Difference of Thermal Converters Measured with a Josephson Source;
 Burroughs, C.J.; Benz, S.P.; Hamilton, C.A.; Harvey, T.E.; Kinard, J.R.; Lipe, T.E.; Sasaki, H.
 Proc., Conf. on Precision Electromagn. Meas. (CPEM), Washington, D.C.: 643-644; Jul 1998.
- AC and DC Voltage Source Using Quantized Pulses;
 Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Christian, L.A.; Harvey, T.E.
 Proc., Conf. on Precision Electromagn. Meas. (CPEM), Washington, D.C.: 437-438; Jul 1998.
- Thermal Transfer Measurements at Microwatt Power Levels;
 Reintsema, C.D.; Kinard, J.R.; Lipe, T.E.; Koch, J.A.; Grossman, E.N.
 Proc., Conf. on Precision Electromagn. Meas. (CPEM), Washington, D.C.: 171-172; Jul 1998.
- The Next Generation of EDS: Microcalorimeter EDS with 3 eV Energy Resolution;
 Martinis, J.M.; Irwin, K.D.; Wollman, D.A.; Hilton, G.C.; Dulcie, L.L.; Bergren, N.F.
 Proc., Microscopy and Microanalysis Conf., Atlanta, GA: 172-173; Jul 1998.
- Programmable 1 Volt DC Voltage Standard;
 Burroughs, C.J.; Benz, S.P.; Hamilton, C.A.; Harvey, T.E.
 Proc., Conf. on Precision Electromagn. Meas. (CPEM), Washington, D.C.: 548-549; Jul 1998.
- Pulse-Driven Josephson Digital/Analog Converter;
 Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Harvey, T.E.; Christian, L.A.; Przybysz, J.X.
 IEEE Trans. Appl. Supercond. 8 (2): 42-47; Jun 1998.
- Pulsed Laser Deposition of Superconducting Nb-Doped Strontium Titanate Thin Films;
 Leitner, A.; Rogers, C.T.; Price, J.C.; Rudman, D.A.; Herman, D.R.
 Appl. Phys. Lett. 72: 3065-3067; Jun 1998.
- Rare Errors in a Well-Characterized Electron Pump: Comparison of Experiment and Theory;
 Keller, M.W.; Martinis, J.M.; Kautz, R.L.
 Phys. Rev. Lett. 80 (20): 4530-4533; May 1998.

- Thermal-Response Time of Superconducting Transition-Edge Microcalorimeters;
 Irwin, K.D.; Hilton, G.C.; Wollman, D.A.; Martinis, J.M.
 J. Appl. Phys. 83(8): 3978-3985; Apr 1998.
- High-Resolution Microcalorimeter Energy-Dispersive Spectrometer for X-Ray Microanalysis and Particle Analysis;
 Wollman, D.A.; Hilton, G.C.; Irwin, K.D.; Dulcie, L.L.; Bergren, N.F.; Newbury, D.E.; Woo, K.-S.; Liu, B.Y.H.; Diebold, A.C.; Martinis, J.M.
 Proc., AIP Conf. "Characterization and Metrology for ULSI Technology" Gaithersburg, MD: 799-804; Mar 1998.
- Impact Energy Measurement in Time-of-Flight Mass Spectrometry with Cryogenic Microcalorimeters;
 Hilton, G.C.; Martinis, J.M.; Wollman, D.A.; Irwin, K.D.; Dulcie, L.L.; Gerber, D.; Gillevet, P.M.; Twerenbold, D.
 Nature 391: 672-675; Feb 1998.
- High Precision Electrical Substitution Radiometry on Superconducting-Resistive-Transition Edge Thermometry;
 Reintsema, C.D.; Koch, J.A.; Grossman, E.N.
 Rev. Sci. Instrum. 69(1): 152-163; Jan 1998.
- Comparison of Heteroepitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ and TiO_2 Thin Film Growth;
 Roshko, A.; Stork, F.J.B.; Rudman, D.A.; Aldrich, D.J.; Hotsenpiller, P.A.M.
 J. Crystal Growth 174: 398-408; 1997.
- Electron-Beam Damaged High-Temperature Superconductor Josephson Junctions;
 Pauza, A.J.; Booi, W.E.; Herrmann, K.; Moore, D.F.; Blamire, M.G.; Rudman, D.A.; Vale, L.R.
 J. Appl. Phys. 82 (11): 5612-5632; Dec 1997.
- High-Resolution, Energy-Dispersive Microcalorimeter Spectrometer for X-Ray Microanalysis;
 Wollman, D.A.; Irwin, K.D.; Hilton, G.C.; Dulcie, L.L.; Newbury, D.E.; Martinis, J.M.
 J. Microscopy 188 (3): 196-223; Dec 1997.
- Stable 1 Volt Programmable Voltage Standard;
 Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Harvey, T.E.; Christian, L.A.
 Appl. Phys. Lett. 71(13): 1866-1868; Sep 1997.
- High Temperature Superconducting Josephson Junctions in a Stacked Bicrystal Geometry;
 Li, H.Q.; Ono, R.H.; Vale, L.R.; Rudman, D.A.; Liou, S.H.
 Appl. Phys. Lett. 71(8): 1121-1123; Aug 1997.
- Use of Polycapillary Optics to Increase the Effective Area of Microcalorimeter Spectrometers;
 Wollman, D.A.; Jezewski, C.; Hilton, G.C.; Qi-Fan, Xiao; Irwin, K.D.; Martinis, J.M.
 Proc., Microscopy and Microanalysis Conf., Cleveland, OH, 1075-1076; Aug 1997.
- Microcalorimeter X-Ray Spectrometers;
 Martinis, J.M.; Wollman, D.A.; Irwin, K.D.; Hilton, G.C.
 Future Fab Intl.; 333-337; Aug 1997.
- High-Energy-Resolution Microcalorimeter Spectrometer for EDS X-Ray Microanalysis;
 Wollman, D.A.; Hilton, G.C.; Irwin, K.D.; Dulcie, L.L.; Newbury, D.E.; Martinis, J.M.
 Proc., Microscopy and Microanalysis Conf. Cleveland, OH, 1073-1074; Aug 1997.

- Josephson Standards for AC Voltage Metrology;
Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Christian, L.A.
Proc., 1997 Natl. Conf. of Standards Labs (NCSL) Workshop and Symp., 7/21-7/27/97, Atlanta, GA: 355-363; Jul 1997.
- Pulse-Driven Josephson Digital/Analog Converter;
Benz, S.P.; Hamilton, C.A.; Burroughs, C.J.; Christian, L.A.; Przybysz, J.X.
Proc., 6th Intl. Superconductive Electronics Conf. (ISEC), 6/25-6/28/97, Berlin, Germany: 134-136; Jun 1997.
- Excess Low-Frequency Flux Noise in dc SQUIDS;
Huber, M.E.; Cromar, M.W.; Ono, R.H.
IEEE Trans. Appl. Supercond. 7(2): 2882-2885; Jun 1997.
- SNS Programmable Voltage Standard;
Hamilton, C.A.; Benz, S.P.; Burroughs, C.J.; Harvey, T.E.
IEEE Trans. Appl. Supercond. 7(2): 2472-2475; Jun 1997.
- Josephson Voltage Standard: A Review;
Hamilton, C.A.; Burroughs, C.J.; Benz, S.P.
IEEE Trans. Appl. Supercond. 7(2): 3756-3761; Jun 1997.
- Surface Resistance and Morphology of YBCO Films as a Function of Thickness;
Stork, F.J.B.; Beall, J.A.; Roshko, A.; DeGroot, D.C.; Rudman, D.A.; Ono, R.H.; Krupka, J.
IEEE Trans. Appl. Supercond. 7(2): 1921-1924; Jun 1997.
- Third-Order Harmonic Generation in High Tc Superconducting Coplanar Waveguides at Microwave Frequencies;
Booth, J.C.; Beall, J.A.; Ono, R.H.; Stork, F.J.B.; Rudman, D.A.; Vale, L.R.
Proc., 6th Intl. Superconductive Electronics Conf., Berlin, Germany, 34-36; Jun 1997.
- $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Josephson Junctions on Bicrystal Al_2O_3 and Sr TiO_3 Substrates;
Vale, L.R.; Ono, R.H.; Rudman, D.A.
IEEE Trans. Appl. Supercond. 7(2): 3193-3196; Jun 1997.
- Constant-Voltage Steps in Arrays of Nb-PdAu-Nb Josephson Junctions;
Benz, S.P.; Burroughs, C.J.
IEEE Trans. Appl. Supercond. 7(2): 2434-2437; Jun 1997.
- Tightly Coupled dc SQUIDS with Resonance Damping;
Ono, R.H.; Koch, J.A.; Steinbach, A.H.; Huber, M.E.; Cromar, M.W.
IEEE Trans. Appl. Supercond. 7(2): 2538-2541; Jun 1997.
- Multilayer Processing of High-Tc Films and Josephson Devices;
Ono, R.H.; Li, H.Q.; Vale, L.R.; Rudman, D.A.; Liou, S.H.
Proc., 6th Intl. Superconductive Electronics Conf., Berlin, Germany, 269-271; Jun 1997.
- Noise from YBCO Films: Size and Substrate Dependence;
McDonald, D.G.; Phelan, R.J.; Vale, L.R.; Ono, R.H.; Rice, J.P.; Borchardt, L.J.; Rudman, D.A.; Cosgrove, J.; Rosenthal, P.A.
IEEE Trans. Appl. Supercond. 7(2): 3091-3095; Jun 1997.

- An Improved Multi-layer Fabrication Process for $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ -based Circuits;
Li, H.Q.; Ono, R.H.; Vale, L.R.; Rudman, D.A.; Liou, S.H.; Mallison, W.H.
IEEE Trans. Appl. Supercond. 7(2): 2169-2172; Jun 1997.
- Millimeter-wave Radiation in High-Tc Josephson Junctions;
Kunkel, G.; Hechtfisher, G.; Frommberger, M.; Veit, K.; Kleiner, R.; Muller, P.; Prusseit, W.; Kinder, H.; Ferchland, L.; Daalmans, G.; Ono, R.H.
IEEE Trans. Appl. Supercond. 7(2): 3339-3342; Jun 1997.
- Microwave Characterization of Coplanar Waveguide Transmission Lines Fabricated by Ion Implantation Patterning of $\text{YBa}_2\text{Cu}_3\text{O}_{7.6}$;
Booth, J.C.; Beall, J.A.; DeGroot, D.C.; Rudman, D.A.; Ono, R.H.; Miller, J.R.; Chen, M.L.; Hong, S.H.; Ma, Q.Y.
IEEE Trans. Appl. Supercond. 7(2): 2780-2783; Jun 1997.
- Operating Margins for a Pulse-Driven Programmable Voltage Standard;
Benz, S.P.; Burroughs, C.J.; Hamilton, C.A.
IEEE Trans. Appl. Supercond. 7(2): 2653-2656; Jun 1997.
- AC Josephson Voltage Standard: Progress Report;
Hamilton, C.A.; Burroughs, C.J.; Benz, S.P.; Kinard, J.R.
IEEE Trans. Instrum. Meas. 46 (2): 224-228; Apr 1997.
- A Compact Transportable Josephson Voltage Standard;
Hamilton, C.A.; Burroughs, C.J.; Kupferman, S.L.; Naujoks, G.A.; Vickery, A.
IEEE Trans. Instrum. Meas. 46 (2): 237-241; Apr 1997.
- A Seven-Junction Electron Pump: Design, Fabrication, and Operation;
Keller, M.W.; Martinis, J.M.; Steinbach, A.H.; Zimmerman, N.M.
IEEE Trans. Instrum. Meas. 46 (2): 307-310; Apr 1997.
- Hot-electron Microcalorimeter for X-ray Detection Using a Superconducting Transition Edge Sensor with Electrothermal Feedback;
Irwin, K.D.; Hilton, G.C.; Martinis, J.M.; Cabrera, B.
Nucl. Instrum. Methods, in Phys. Res. A 370: 177-179; 1996.
- Hot-Electron-Microcalorimeters with 0.25 mm^2 Area;
Martinis, J.M.
Nucl. Instrum. Methods, in Phys. Res. A 370: 171-172; 1996.
- Thermally Activated Escape from the Zero-Voltage State in Long Josephson Junctions;
Castellano, M.G.; Torrioli, G.; Cosmelli, C.; Costantini, A.; Chiarello, F.; Carelli, P.; Rotoli, G.; Cirillo, M.; Kautz, R.L.
Phys. Rev. B 54(21): 417-428; Dec 1996.
- EDS X-ray Microcalorimeters with 13 eV Energy Resolution;
Wollman, D.A.; Hilton, G.C.; Irwin, K.D.; Martinis, J.M.
J. Microscopy Soc. Am. 488-489; Dec 1996.
- A Novel Multilayer Circuit Process Using $\text{YBa}_2\text{Cu}_3\text{O}_x/\text{SrTiO}_3$ Thin Films Patterned by Wet Etching and Ion Milling;
Li, H.Q.; Ono, R.H.; Vale, L.R.; Rudman, D.A.; Liou, S.H.
Appl. Phys. Lett. 69(18): 2752-2754; Oct 1996.

X-ray Detection Using a Superconducting Transition-edge Sensor Microcalorimeter with Electrothermal Feedback;

Irwin, K.D.; Hilton, G.C.; Wollman, D.A.; Martinis, J.M.

Appl. Phys. Lett. 69(13): 1945-1947; Sep 1996.

Metrology for Electromagnetic Technology: A Bibliography of NIST Publications;

Bradford, A.G.

NISTIR 5051, 74 pp; Sep 1996.

A Superconducting Bolometer with Strong Electrothermal Feedback;

Lee, A.T.; Richards, P.L.; Nam, S.W.; Cabrera, B.; Irwin, K.D.

Appl. Phys. Lett. 69 (12): 1801-1803; Sep 1996.

Accuracy of Electron Counting Using a 7-Junction Electron Pump;

Keller, M.W.; Martinis, J.M.; Zimmerman, N.M.; Steinbach, A.H.

Appl. Phys. Lett. 69 (12): 1804-1806; Sep 1996.

Low Noise High-temperature Superconducting Bolometers for Infrared Imaging;

Berkowitz, S.J.; Hirahara, A.S.; Char, K.; Grossman, E.N.

Appl. Phys. Lett. 69(14): 2125-2127; Sep 1996.

Mutual Phase-locking of Ten YBCO Step-edge Josephson Junctions up to 45 K;

Kunkel, G.; Ono, R.H.

Appl. Phys. Lett. 69(13): 1960-1962; Sep 1996.

Noise, Chaos, and the Josephson Voltage Standard;

Kautz, R.L.

Reports on Progress in Phys. 59: 935-992; Aug 1996.

Pattern and Polarization Measurements of Integrated-Circuit Spiral Antennas at 10 μm Wavelength;

MacDonald, M.E.; Grossman, E.N.

Proc., Intl. Conf. Millimeter and Submillimeter Waves and App. III, Denver, CO, SPIE 2842: 501-512; Aug. 1996.

Far-Infrared Bandpass Grid Filters;

MacDonald, M.E.; Grossman, E.N.

Proc., Intl. Conf. Millimeter and Submillimeter Waves and App. III, Denver, CO, SPIE 2842:377-385; Aug. 1996.

Far-Infrared Radiometers Based upon High-T_c and Low-T_c Superconducting Transition-Edge Thermometers;

Grossman, E.N. ; Reintsema, C.D.; Koch, J.A.; Berkowitz, S.J.; Hirahara, A.S.; Char, K.

Proc., Intl. Conf. Millimeter and Submillimeter Waves and App. III, Denver, CO, SPIE 2842: 460-468; Aug. 1996.

Progress Toward an AC Josephson Voltage Standard;

Hamilton, C.A.; Burroughs, C.J.; Benz, S.P.

Proc., Conf. on Precision Electromagn. Meas. (CPEM), 6/17-6/20/96, Braunschweig, Germany: 140-141; Jun 1996.

High Power Generation with Distributed Josephson-Junction Arrays;

Booi, P.A.A.; Benz, S.P.

Appl. Phys. Lett. 68(24): 3799-3801; Jun 1996.

- A Pulse-Driven Programmable Josephson Voltage Standard;
Benz, S.P.; Hamilton, C.A.
Appl. Phys. Lett. 68(22): 3171-3173; May 1996.
- Observation of Hot-electron Shot Noise in a Metallic Resistor;
Steinbach, A.H.; Martinis, J.M.; Devoret, M.H.
Phys. Rev. Lett. 76(20): 3806-3809; May 1996.
- Vortex Images in Thin Films of YBCO and BSCCO Obtained by Low-Temperature Magnetic Force Microscopy;
Yuan, C.W.; Zheng, Z.; de Lozanne, A.L.; Tortonese, M.; Rudman, D.A.; Eckstein, J.N.
J. Vac. Sci. Tech. 14(2): 1210-1213; Mar 1996.
- Magnetic Flux Pinning in Epitaxial $\text{YBa}_2\text{Cu}_3\text{O}_{7-\delta}$ Thin Films;
Roshko, A.; Goodrich, L.F.; Rudman, D.A.; Moerman, R.; Vale, L.R.
J. Electron. Mater. 24(12): 1919-1922; 1995.
- High-Power, High-Frequency Oscillators Using Distributed Josephson-Junction Arrays;
Booi, P.A.A.; Benz, S.P.
Proc., 5th Intl. Superconductive Electronics Conf., Sep 18-21, 1995, Nagoya, Japan: 513-515; 1995.
- Lithographic Antennas for Submillimeter and Infrared Frequencies;
Grossman, E.N.
Symp. Rec., IEEE Intl. Symp. on Electromagnetic Compatibility, Aug. 14-18, 1995, Atlanta, GA, 102-107; 1995.
- Shipiro Steps in Large-Area Metallic-Barrier Josephson Junctions;
Kautz, R.L.
J. Appl. Phys. 78(9): 5811-5819; Nov 1995.
- Superconductor-Normal-Superconductor Junctions for Programmable Voltage Standards;
Benz, S.P.
Appl. Phys. Lett. 67(18): 2714-2716; Oct 1995.
- High-Frequency Oscillators Using Phase-Locked Arrays of Josephson Junctions;
Benz, S.P.; Booi, P.A.A.
IEEE Trans. Ultrason., Ferroelec., and Freq. Control 42(5): 964-966; Sep 1995.
- Controlling the Critical Current Density of High-Temperature SNS Josephson Junctions;
Ono, R.H.; Vale, L.R.; Reintsema, C.D.; Kunkel, G.; Berkowitz, S.J.
Proc., 5th Intl. Superconductive Electronics Conf.; Sep 18-21, 95; Nagoya, Japan, 114-116; Sep 1995.
- Superconductor-Normal-Superconductor Junctions for Digital/Analog Converters;
Benz, S.P.
Proc., 5th Intl. Superconductive Electronics Conf.; Sep 18-21, 95; Nagoya, Japan, 216-218; Sep 1995.
- Metrology for Electromagnetic Technology: A Bibliography of NIST Publications;
Bradford, A.G.
NISTIR 5040, 76 pp; Sep 1995.

- Design of High-frequency, High-power Oscillators Using Josephson-junction Arrays;
 Booi, P.A.A.; Benz, S.P.
 Proc., Applied Superconductivity Conf.; Jul 3-6, 1995; Edinburgh, Scotland, 1479-1482; Jul 1995.
- Metallic-barrier Junctions for Programmable Josephson Voltage Standards;
 Kautz, R.L.; Benz, S.P.
 Proc., Applied Superconductivity Conf.; Jul 3-6, 1995; Edinburgh, Scotland, 1407-1410; Jul 1995.
- A Self-Biasing Cryogenic Particle Detector Utilizing Electrothermal Feedback and a SQUID Readout;
 Irwin, K.D.; Nam, S.W.; Cabrera, B.; Chugg, B.; Park, G.S.; Welty, R.P.; Martinis, J.M.
 IEEE Trans. Appl. Supercond. 5(2): 2690-2693; Jun 1995.
- Direct Observation of Vortex Dynamics in Two-Dimensional Josephson-Junction Arrays;
 Doderer, T.; Lachenmann, S.G.; Huebener, R.P.; Booi, P.A.A.; Benz, S.P.
 IEEE Trans. Appl. Supercond. 5(2): 2723-2726; Jun 1995.
- 30 THz Mixing Experiments on High Temperature Superconducting Josephson Junctions;
 Grossman, E.N.; Vale, L.R.; Rudman, D.A.; Evenson, K.M.; Zink, L.R.
 IEEE Trans. Appl. Supercond. 5 (2): 3061-3064; Jun 1995.
- Ferroelectric Thin Film Characterization Using Superconducting Microstrip Resonators;
 Galt, D.; Price, J.C.; Beall, J.A.; Harvey, T.E.
 IEEE Trans. Appl. Supercond. 5(2): 2575-2578; Jun 1995.
- Stable Phase Locking in a Two-Cell Ladder Array of Josephson Junctions;
 Larsen, B.H.; Benz, S.P.
 Appl. Phys. Lett. 66(23): 3209-3211; Jun 1995.
- The Critical Current and Normal Resistance of High- T_c Step-Edge SNS Junctions;
 Reintsema, C.D.; Ono, R.H.; Barnes, G.; Borchardt, L.J.; Harvey, T.E.; Kunkel, G.; Rudman, D.A.;
 Vale, L.R.; Missert, N.; Rosenthal, P.A.
 IEEE Trans. Appl. Supercond. 5(2): 3405-3409; Jun 1995.
- Resonances in Two-Dimensional Array Oscillator Circuits;
 Booi, P.A.A.; Benz, S.P.
 IEEE Trans. Appl. Supercond. 5(2): 2899-2902; Jun 1995.
- Phase Locking in Two-Dimensional Arrays of Josephson Junctions: Effect of Critical-Current Nonuniformity;
 Kautz, R.L.
 IEEE Trans. Appl. Supercond. 5(2): 2702-2706; Jun 1995.
- Temperature Dependence and Magnetic Field Modulation of Critical Currents in Step-Edge SNS YBCO/Au Junctions;
 Missert, N.; Vale, L.R.; Ono, R.H.; Reintsema, C.D.; Rudman, D.A.; Thomson, R.E.; Berkowitz, S.J.
 IEEE Trans. Appl. Supercond. 5(2): 2969-2972; Jun 1995.
- Hot-Electron Microcalorimeters as High-Resolution X-Ray Detectors;
 Nahum, M.; Martinis, J.M.
 Appl. Phys. Lett. 66(23): 3203-3205; Jun 1995.

Superconducting Integrated Circuit Fabrication Process Utilizing Low Temperature ECR-Based PECVD SiO₂ Dielectric Films;

Sauvageau, J.E.; Booi, P.A.A.; Cromar, M.W.; Benz, S.P.; Burroughs, C.J.; Koch, J.A.
IEEE Trans. Appl. Supercond. 5 (2): 2303-2309; Jun 1995.

Step-Edge and Stacked-Heterostructure High-T_c Josephson Junctions for Voltage-Standard Arrays;

Benz, S.P.; Reintsema, C.D.; Ono, R.H.; Eckstein, J.N.; Bozovic, I.; Virshup, G.F.
IEEE Trans. Appl. Supercond. 5(2): 2915-2918; Jun 1995.

Stacked Series Arrays of High-T_c Trilayer Josephson Junctions;

Eckstein, J.N.; Bozovic, I.; Virshup, G.F.; Ono, R.H.; Benz, S.P.
IEEE Trans. Appl. Supercond. 5(2): 3284-3287; Jun 1995.

Microwave Properties of Voltage-Tunable YBa₂Cu₃O_{7-δ}/SrTiO₃ Coplanar Waveguide Transmission Lines;

DeGroot, D.C.; Beall, J.A.; Marks, R.B.; Rudman, D.A.
IEEE Trans. Appl. Supercond. 5(2): 2272-2275; Jun 1995.

Partially Coherent Transmittance of Dielectric Lamellae;

Grossman, E.N.; McDonald, D.G.
Optical Engineering 34(5): 1289-1295; May 1995.

Josephson D/A Converter with Fundamental Accuracy;

Hamilton, C.A.; Burroughs, C.J.; Kautz, R.L.
IEEE Trans. Instrum. Meas. 44(2): 223-225; Apr 1995.

Niobium Microbolometers for Far-Infrared Detection;

MacDonald, M.E.; Grossman, E.N.
IEEE Trans. Microwave Theory Tech. 43(4): 893-896; Apr 1995.

Performance and Reliability of NIST 10-V Josephson Arrays;

Hamilton, C.A.; Burroughs, C.J.
IEEE Trans. Instrum. Meas. 44(2): 238-240; Apr 1995.

Microwave Noise in High-T_c Josephson Junctions;

Grossman, E.N.; Vale, L.R.; and Rudman, D.A.
Appl. Phys. Lett. 66(13): 1680-1682; Mar 1995.

Testing for Metrological Accuracy of the Electron Pump;

Martinis, J.M.; Nahum, M.; Jensen, H.D.
Physica B 194-196: 1045-1046; 1994.

High-T_c Superconducting Antenna-Coupled Microbolometer on Silicon;

Rice, J.P.; Grossman, E.N.; Borchardt, L.J.; Rudman, D.A.
Proc. Soc. Photo-Opt. Instrum. Engrs. OE/LASE'94, Vol. 2159, Los Angeles, CA, Jan 1994, pp 98-109; 1994.

High-Frequency Oscillators Using Phase-Locked Arrays of Josephson Junctions;

Benz, S.P.; Booi, P.A.A.
Proc., IEEE Intl. Frequency Control Symposium, June 1-3, 1994, Boston, MA, pp. 666-669; 1994.

Optimization of ECR-Based PECVD Oxide Films for Superconducting Integrated Circuit Fabrication;

Sauvageau, J.E.; Burroughs, C.J.; Cromar, M.W.; Koch, J.A.
Proc., 37th Annual Tech. Conf. Society of Vacuum Coaters, May 8-13, 1994, Boston, MA; 1994.

- Novel Hot-Electron Microbolometer;
Nahum, M.; Martinis, J.M.
Physica B 194-196: 109-110; 1994.
- Heterodyne Mixing and Direct Detection in High Temperature Josephson Junctions;
Grossman, E.N.; Vale, L.R.
Proc., Fifth Intl. Symp. on Space Terahertz Technology, May 10-12, 1994, Ann Arbor, MI, pp. 244-263; 1994.
- Mutual Phase Locking in Systems of High- T_c Superconductor-Normal Metal-Superconductor Junctions;
Reintsema, C.D.; Ono, R.H.; Harvey, T.E.; Missert, N.; Vale, L.R.
Proc., Superconductive Devices and Circuits Conf. of SPIE, January 25-27, 1994, Los Angeles, CA, pp 208-218; 1994.
- Performance of the Electron Pump with Stray Capacitances;
Jensen, H.D.; Martinis, J.M.
Physica B 194-196: 1255-1256; 1994.
- Coexistence of Grains with Differing Orthorhombicity in High Quality YBCO Thin Films;
de Obaldia, E.I.; Ludwig, Jr., K.F.; Berkowitz, S.J.; Clark, A.M.; Skocpol, W.J.; Mankiewich, P.M.; Rudman, D.A.; Roshko, A.; Moerman, R.; Vale, L.R.; Ono, R.H.
Appl. Phys. Lett. 65(26): 3395-3397; Dec 1994.
- Electronic Microrefrigerator Based on a Normal-Insulator-Superconductor Tunnel Junction;
Nahum, M.; Eiles, T.M.; Martinis, J.M.
Appl. Phys. Lett. 65(24): 2123-2125; Dec 1994.
- Quasipotential and the Stability of Phase Lock in Nonhysteretic Josephson Junctions;
Kautz, R.L.
J. Appl. Phys. 76(9): 5538-5544; Nov 1994.
- Novel Vortex Dynamics in Two-Dimensional Josephson Arrays;
Lachenmann, S.G.; Doderer, T.; Huebener, R.P.; Booi, P.A.A.; Benz, S.P.
Proc., Nonlinear Superconducting Devices and High- T_c Materials Conf.; Oct 8-13, 1994; Capri, Italy, 365-372; Oct 1994.
- Large-Amplitude Shapiro Steps and Self-field Effects in High- T_c Josephson Weak Links;
Kautz, R.L.; Benz, S.P.; Reintsema, C.D.
Appl. Phys. Lett. 65(11): 1445-1447; Sep 1994.
- Increased Transition Temperature in *In Situ* Coevaporated $\text{YBa}_2\text{Cu}_3\text{O}_{7.5}$ Thin Films by Low Temperature Post-Annealing;
Berkowitz, S.J.; de Obaldia, E.I.; Ludwig, Jr., K.F.; Skocpol, W.J.; Mankiewich, P.M.; Ono, R.H.; Beall, J.A.; Vale, L.R.; Rudman, D.A.; O'Malley, M.L.; Drabek, L.M.; Polakos, P.A.
Appl. Phys. Lett. 65(12): 1587-1589; Sep 1994.
- Phase-Locked Oscillator Optimization for Arrays of Josephson Junctions;
Wiesenfeld, K.; Benz, S.P.; Booi, P.A.A.
J. Appl. Phys. 76(6): 3835-3846; Sep 1994.
- Self-reciprocal Fourier Functions;
Coffey, M.W.
J. Optical Soc. Amer. A 11(9): 2453-2455; Sep 1994.

- Metrology for Electromagnetic Technology: A Bibliography of NIST Publications;
Smith, A.J.
NISTIR 5029, 88 pp; Sep 1994.
- Antenna-Coupled High- T_c Air-bridge Microbolometer on Silicon;
Rice, J.P.; Grossman, E.N.; Rudman, D.A.
Appl. Phys. Lett. 65(6): 773-775; Aug 1994.
- Observation of Vortex Dynamics in Two-Dimensional Josephson-Junction Arrays;
Lachenmann, S.G.; Doderer, T.; Hoffmann, D.; Huebener, R.P.; Booi, P.A.A.; Benz, S.P.
Phys. Rev. B 50(5): 3158-3164; Aug 1994.
- Thermal Noise in High-Temperature Superconducting-Normal-Superconducting Step-Edge Josephson Junctions;
Berkowitz, S.J.; Skocpol, W.J.; Mankiewich, P.M.; Ono, R.H.; Missert, N.; Rosenthal, P.A.; Vale, L.R.
J. Appl. Phys. 76(2): 1337-1339; Jul 1994.
- Combined Josephson and Charging Behavior of the Supercurrent in the Superconducting Single-Electron Transistor;
Eiles, T.M.; Martinis, J.M.
Phys. Rev. B 50(1): 627-630; Jul 1994.
- Characterization of the Emission from 2D Array Josephson Oscillators;
Booi, P.A.A.; Benz, S.P.
Fifth Intl. Symp. on Space Terahertz Tech., May 10-12, 1994, Ann Arbor, MI, pp 234-243; May 1994.
- Emission Linewidth Measurements of Two-Dimensional Array Josephson Oscillators;
Booi, P.A.A.; Benz, S.P.
Appl. Phys. Lett. 64(16): 2163-2165; Apr 18, 1994.
- Terahertz Shapiro Steps in High Temperature SNS Josephson Junctions;
Rosenthal, P.A.; Grossman, E.N.
IEEE Trans. Microwave Theory Tech. 42(4): 707-714; Apr 1994.
- Dielectric Properties of Thin Film STO Grown on LAO with YBCO Electrodes;
Wu, H.D.; Barnes, F.S.; Galt, D.; Price, J.C.; Beall, J.A.
Proc., SPIE, High- T_c Superconductors and Applications Conf., 2156: 131-140; Apr 1994.
- Dielectric Properties of Thin Film SrTiO_3 Grown on LaAlO_3 with $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Electrodes;
Wu, H.D.; Barnes, F.S.; Galt, D.; Price, J.C.; Beall, J.A.
Proc., Soc. Photo-Opt. Instrum. Engrs. High T_c Microwave Superconductors and Applications Symp., Vol. 2156, Jan 25-27, 1994, Los Angeles, CA, pp 131-140; Apr 7, 1994.
- Metrological Accuracy of the Electron Pump;
Martinis, J.M.; Nahum, M.; Jensen, H.D.
Phys. Rev. Lett. 72(6): 904-907; Feb 7, 1994.
- Phase Locking in Two-Junction Systems of High-Temperature Superconductor-Normal Metal-Superconductor Junctions;
Reintsema, C.D.; Ono, R.H.; Harvey, T.E.; Missert, N.
Appl. Phys. Lett. 64(5): 637-639; Jan 31, 1994.

- NISTVOLT - A Program for Automating Measurements with Josephson Array Voltage Standards;
Hamilton, C.A.
NIST Computer Program; 1993.
- Even-Odd Symmetry Breaking in the NSN Coulomb Blockade Electrometer;
Eiles, T.M.; Martinis, J.M.; Devoret, M.H.
Physica B 6123H: 1-8; 1993.
- Optical Performance of Photoinductive Mixers at Terahertz Frequencies;
Grossman, E.N.; Sauvageau, J.E.; McDonald, D.G.
Proc., Fourth Intl. Symp. on Space Terahertz Technology, Feb 1993, Los Angeles, CA; 1993.
- Hot-Electron Microcalorimeters for X-Ray and Phonon Detection;
Nahum, M.; Martinis, J.M.; Castles, S.
J. Low Temp. Phys. 93(3/4): 733-738; 1993.
- Effect of Environmental Noise on the Accuracy of Coulomb-Blockade Devices;
Martinis, J.M.; Nahum, M.
Phys. Rev. B 48(24): 18 316-18 319; Dec 15, 1993.
- Suitability of Metalorganic Chemical Vapor Deposition-Derived PrGaO_3 Films as Buffer Layers for $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}$ Pulsed Laser Deposition;
Han, B.; Neumayer, D.A.; Marks, T.J.; Rudman, D.A.; Zhang, H.; Dravid, V.P.
Appl. Phys. Lett. 63(26): 3639-3641; Dec 27, 1993.
- Thermal Isolation of High-Temperature Superconducting Thin Films Using Silicon Wafer Bonding and Micromachining;
Bang, C.A.; Rice, J.P.; Flik, M.I.; Schmidt, M.A.; Rudman, D.A.
J. Microelectromech. Syst. 2(4): 160-164; Dec 1993.
- Ultrasensitive-Hot-Electron Microbolometer;
Nahum, M.; Martinis, J.M.
Appl. Phys. Lett. 63(22): 3075-3077; Nov 1993.
- Characterization of a Tunable Thin Film Microwave $\text{YBa}_2\text{Cu}_3\text{O}_{7-x}/\text{SrTiO}_3$ Coplanar Capacitor;
Galt, D.; Price, J.C.; Beall, J.A.; Ono, R.H.
Appl. Phys. Lett. 63(22): 3078-3080; Nov 1993.
- High Temperature Superconductor-Normal Metal-Superconductor Josephson Junctions with High Characteristic Voltages;
Rosenthal, P.A.; Grossman, E.N.; Ono, R.H.; Vale, L.R.
Appl. Phys. Lett. 63(4): 1984-1986; Oct 4, 1993.
- High-Tc Multilayer Step-edge Josephson Junctions and SQUIDs;
Missert, N.; Harvey, T.E.; Ono, R.H.; Reintsema, C.D.
Appl. Phys. Lett. 63(12): 1690-1692; Sep 1993.
- Noise Reduction in Low-Frequency SQUID Measurements with Laser-Driven Switching;
Cunningham, C.E.; Park, G.S.; Cabrera, B.; Huber, M.E.
Appl. Phys. Lett. 63(8): 1152-1154; Aug 1993.

- Kinetic-Inductance Infrared Detector Based on an Antenna-Coupled High- T_c SQUID;
 Rice, J.P.; Grossman, E.N.; Missert, N.; Rosenthal, P.A.; Cromar, M.W.; Rudman, D.A.
 Proc., Fourth Intl. Superconductive Electronics Conf., Aug 11-14, 1993, Boulder, CO, pp 382-383; Aug 1993.
- Extended CO(7-6) Emission from Warm Gas in Orion;
 Howe, J.E.; Jaffe, D.T.; Grossman, E.N.; Wall, W.F.; Mangum, J.G.; Stacey, G.J.
 Astrophys. J. 410: 179-187; Jun 10, 1993.
- Intrinsic Stress in dc Sputtered Niobium;
 Booi, P.A.A.; Livingston, C.A.; Benz, S.P.
 IEEE Trans. Appl. Supercond. 3(2): 3029-3031; Jun 1993.
- Chaos in a Computer-Animated Pendulum;
 Kautz, R.L.
 Am. J. Phys. 61(5): 407-415; May 1993.
- Absolute Magnetic Penetration Depth of Thin-film Niobium Measured by Fluxoid Quantization;
 Cunningham, C.E.; Park, G.S.; Cabrera, B.; Huber, M.E.
 Appl. Phys. Lett. 62(17): 2122-2124; Apr 1993.
- Frequency Dependence of the Emission from 2D Array Josephson Oscillators;
 Booi, P.A.A.; Benz, S.P.; Doderer, T.; Hoffmann, D.; Schmidt, J.; Lachenmann, S.G.; Huebener, R.P.
 IEEE Trans. Appl. Supercond. 3(1): 2493-2495; Mar 1993.
- Proposed High-Accuracy Superconducting Power Meter for Millimeter Waves;
 Kautz, R.L.; McDonald, D.G.; Walker, D.K.; Williams, D.F.
 IEEE Trans. Appl. Supercond. 3(1): 2152-2155; Mar 1993.
- High- T_c SNS Junctions for Multilevel Integrated Circuits;
 Ono, R.H.; Vale, L.R.; Kimminau, K.R.; Beall, J.A.; Cromar, M.W.; Reintsema, C.D.; Harvey, T.E.;
 Rosenthal, P.A.; Rudman, D.A.
 IEEE Trans. Magn. 3(1): 2389-2392; Mar 1993.
- Two-Stage Integrated SQUID Amplifier with Series Array Output;
 Welty, R.P.; Martinis, J.M.
 IEEE Trans. Appl. Supercond. 3(1): 2605-2608; Mar 1993.
- Experimental Results on Single Flux Quantum Logic;
 Benz, S.P.; Burroughs, C.J.; Hamilton, C.A.
 IEEE Trans. Appl. Supercond. 3(1): 2582-2585; Mar 1993.
- Sub-Picosecond Measurement of Time Intervals Using Single Flux Quantum Electronics;
 Rosenthal, P.A.
 IEEE Trans. Appl. Supercond. 3(1): 2645-2648; Mar 1993.
- Self-Heating in the Coulomb-Blockade Electrometer;
 Kautz, R.L.; Zimmerli, G.; Martinis, J.M.
 J. Appl. Phys. 73(5): 2386-2396; Mar 1, 1993.
- Single Trapped Vortices Induced in a Superconducting Film by Laser Switching;
 Park, G.S.; Cunningham, C.E.; Cabrera, B.; Huber, M.E.
 J. Appl. Phys. 73(5): 2419-2423; Mar 1993.

- Growth and Characterization of YBCO/Insulator/YBCO Trilayers;
Missert, N.; Reintsema, C.D.; Beall, J.A.; Harvey, T.E.; Ono, R.H.; Rudman, D.A.
IEEE Trans. Appl. Supercond. 1741-1744; Mar 1993.
- Etching and Annealing of Substrates for Superconducting Multilayers and Devices;
Berkowitz, S.J.; de Obaldia, E.I.; Galloway, M.L.; Morales, G.; Ludwig, K.F.; Mankiewich, P.M.;
Skocpol, W.J.; Ono, R.H.; Beall, J.A.; Vale, L.R.; Rudman, D.A.
IEEE Trans. Appl. Supercond. 3(1): 2950-2952; Mar 1993.
- Even-Odd Asymmetry of a Superconductor Revealed by the Coulomb Blockade of Andreev Reflection;
Eiles, T.M.; Martinis, J.M.; Devoret, M.H.
Phys. Rev. Lett. 70: 1862-1865; Mar 22, 1993.
- Automated Josephson Integrated Circuit Test System;
Burroughs, C.J.; Hamilton, C.A.
IEEE Trans. Appl. Supercond. 3(1): 2687-2689; Mar 1993.
- SUSAN (SUperconducting Systems ANALysis) by Low Temperature Scanning Electron Microscopy (LTSEM);
Doderer, T.; Hoffmann, D.; Huebener, R.P.; Kirchmann, N.; Krulle, C.A.; Lachenmann, S.G.; Quenter, D.; Schmidt, J.; Stehle, S.; Niemeyer, J.; Popel, R.; Benz, S.P.; Booi, P.A.A.
IEEE Trans. Appl. Supercond. 3(1): 2724-2727; Mar 1993.
- Increased Pinning Energies and Critical Current Densities in Heavy-Ion-Irradiated $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ Single Crystals;
Cutro, J.A.; Rudman, D.A.; vanDover, R.B.; Schneemeyer, L.F.; White, A.E.; Gyorgy, E.M.;
Waszczak, J.V.; Felder, R.J.
Appl. Phys. Lett. 62(7): 759-761; Feb 15, 1993.
- Tunable High Temperature Superconductor Microstrip Resonators;
Beall, J.A.; Ono, R.H.; Galt, D.; Price, J.C.
IEEE MTT-S Digest, 1993 IEEE MTT-S Intl. Micr. Symp. Jun 14-18, 1993, Atlanta, GA, pp 1421-1423; Jan 1993.
- Voltage-Standard Devices;
Hamilton, C.A.
Concise Encyclopedia of Magnetic and Superconducting Materials, Evetts, J., ed, Pergamon Press, Tarrytown, NY, pp 621-624; 1992.
- Electrical and Infrared Properties of Thin Niobium Microbolometers Near T_c ;
Grossman, E.N.; Sauvageau, J.E.; McDonald, D.G.
Proc., Third Intl. Symp. on Space Terahertz Technology, Mar 1992, Ann Arbor, MI, pp 643-653; 1992.
- Noise Measurements on DC-SQUIDS with Varied Design;
Condron II, M.R.; Gutt, G.M.; Muhlfelder, B.; Lockhart, J.M.; Turneaure, J.P.; Huber, M.E.; Cromar, M.W.; Houseman, E.K.
Superconducting Devices and Their Applications 64: 312-315; 1992; 1992.
- First Phase Formation Kinetics in the Reaction of Nb/Al;
Coffey, K.R.; Rudman, D.A.; Foner, S.
Proc., Mater. Res. Soc., Apr 29-May 3, 1991, Anaheim, CA, Vol. 230, pp 55-60; 1992.

- Effect of Microstructure on Phase Formation in the Reaction of Nb/Al Multilayer Thin Films;
Barmak, K.; Rudman, D.A.; Foner, S.
Proc., Mater. Res. Soc., Apr 29-May 3, 1991, Anaheim, CA, Vol. 230, pp 61-66; 1992.
- Design and Operation of Series-Array Josephson Voltage Standards;
Kautz, R.L.
Proc., Intl. School of Physics Enrico Fermi, Course CX, Jun 27-Jul 7, 1989, Villa Marigola: pp 259-296; 1992.
- Accuracy of the Electron Pump;
Jensen, H.D.; Martinis, J.M.
Phys. Rev. B 46(20): 407-427; Nov 1992.
- YBa₂Cu₃O_{7-x} to Si Interconnection for Hybrid Superconductor/Semiconductor Integration;
Harvey, T.E.; Moreland, J.; Jeanneret, B.; Ono, R.H.; Rudman, D.A.
Appl. Phys. Lett. 61(18): 2225-2227; Nov 2, 1992.
- Voltage Gain in the Single-Electron Transistor;
Zimmerli, G.; Kautz, R.L.; Martinis, J.M.
Appl. Phys. Lett. 61(21): 2616-2618; Nov 23, 1992.
- Josephson Voltage Standard Based on Single-Flux-Quantum Voltage Multipliers;
Hamilton, C.A.
IEEE Trans. Appl. Supercond. 2(3): 139-142; Sep 1992.
- Thin Film Reaction Kinetics of Niobium/Aluminum Multilayers;
Coffey, K.R.; Rudman, D.A.; Foner, S.
J. Appl. Phys. 72(4): 1341-1349; Aug 15, 1992.
- Effect of Thermal Noise on Shapiro Steps in High-T_c Josephson Weak Links;
Kautz, R.L.; Ono, R.H.; Reintsema, C.D.
Appl. Phys. Lett. 61(3): 342-344; Jul 20, 1992.
- Noise in the Coulomb Blockade Electrometer;
Zimmerli, G.; Eiles, T.M.; Kautz, R.L.; Martinis, J.M.
Appl. Phys. Lett. 61(2): 237-239; Jul 13, 1992.
- Thermal Enhancement of Cotunneling in Ultra-Small Tunnel Junctions;
Eiles, T.M.; Zimmerli, G.; Jensen, H.D.; Martinis, J.M.
Phys. Rev. Lett. 69(1): 148-151; Jul 1992.
- Measuring the Electron's Charge and the Fine-Structure Constant by Counting Electrons on a Capacitor;
Williams, E.R.; Ghosh, R.N.; Martinis, J.M.
NIST JRES, 92(2); Mar-Apr 1992.
- Vortex Pinning Force in a Superconducting Niobium Strip;
Park, G.S.; Cunningham, C.E.; Cabrera, B.; Huber, M.E.
Phys. Rev. Lett 68(12): 1920-1922; Mar 1992.
- Measurement of the Weak-Localization Complex Conductivity at 1 GHz in Disordered Ag Wires;
Pieper, J.B.; Price, J.C.; Martinis, J.M.
Phys. Rev. B 45(7): 3857-3891; Feb 1992.

- Tunneling Spectroscopy of High Critical Temperature Superconductors Using SET Junctions;
Walsh, T.; Moreland, J.; Ono, R.H.; Beall, J.A.; Cromar, M.W.; Harvey, T.E.; Reintsema, C.D.;
Kalkur, T.S.
IEEE Trans. Magn. MAG-27: 840; 1991.
- Use of Ion Scattering Spectroscopy to Monitor the Nb Target Mitridation During Reactive Sputtering;
Lichtenwalner, D.J.; Anderson, A.C.; Rudman, D.A.
Proc., Mater. Soc. Symp. 121, Issue 613; 1991.
- Two-Dimensional Arrays of Josephson Junctions as Voltage-Tunable Oscillators;
Benz, S.P.; Burroughs, C.J.
Superconductor Sci. Tech. 4: 561-567; 1991.
- Margins and Yield in Single Flux Quantum Logic;
Hamilton, C.A.; Gilbert, K.C.
IEEE Trans. Appl. Supercond. 1(4): 157-163; Dec 1991.
- Lithographic Spiral Antennas at Short Wavelengths;
Grossman, E.N.; Sauvageau, J.E.; McDonald, D.G.
Appl. Phys. Lett. 59(25): 3225-3227; Dec 1991.
- High-Tc Superconductor-Normal Metal-Superconductor Josephson Microbridges with High-resistance Normal Metal Links;
Ono, R.H.; Beall, J.A.; Cromar, M.W.; Harvey, T.E.; Johansson, M.E.; Reintsema, C.D.; Rudman, D.A.
Appl. Phys. Lett. 59(9): 1126-1128; Aug 1991.
- Two-Dimensional Arrays of Josephson Junctions as Voltage-Tunable Oscillators;
Benz, S.P.; Burroughs, C.J.
Proc., Intl. Superconductive Electronics Conf., Jun 23-27, 1991: 230-237; Jun 1991.
- Coherent Emission from Two-Dimensional Josephson Junction Arrays;
Benz, S.P.; Burroughs, C.J.
Appl. Phys. Lett. 58(19): 2162-2164; May 13, 1991.
- A 24-GHz Josephson Array Voltage Standard;
Hamilton, C.A.; Kautz, R.L.; Stieg, M.; Chieh, K.; Arvin, W.; Simmonds, M.B.
IEEE Trans. Instrum. Meas. 40(2): 301-304; Apr 1991.
- The Effects of Anneal Time and Cooling Rate on the Formation and Texture of $\text{Bi}_2\text{Sr}_2\text{CaCu}_2\text{O}_8$ Films;
Matthiesen, M.M.; Graybeal, J.M.; Orlando, T.P.; VanderSande, J.B.; Rudman, D.A.
IEEE Trans. Magn. 27(2): 1223-1226; Mar 1991.
- Superconducting Kinetic Inductance Radiometer;
Sauvageau, J.E.; McDonald, D.G.; Grossman, E.N.
IEEE Trans. Magn. 27(2): 2757-2760; Mar 1991.
- Josephson Counting Analog to Digital Converter;
Miller, D.L.; Przybysz, J.X.; Kang, J.; Hamilton, C.A.; Burnell, D.M.
IEEE Trans. Magn. 27(2): 2761-2764; Mar 1991.

- Grain Alignment and Transport Properties of $\text{Bi}_2\text{Sr}_2\text{Cu}_2\text{O}_8$ Grown by Laser-Heated Float Zone Method;
Luo, J.; Jiang, X.P.; Chow, H.M.; Cima, M.J.; Graybeal, J.M.; Orlando, T.P.; Rudman, D.A.
IEEE Trans. Magn. 27(2): 1499-1502; Mar 1991.
- Far-Infrared Kinetic-Inductance Detectors;
Grossman, E.N.; McDonald, D.G.; Sauvageau, J.E.
IEEE Trans. Magn. 27(2): 2677-2680; Mar 1991.
- $\text{Yb}_2\text{Cu}_3\text{O}_x$ /Insulator Multi-layers for Crossover Fabrication;
Beall, J.A.; Cromar, M.W.; Harvey, T.E.; Johansson, M.E.; Ono, R.H.; Rudman, D.A.; Nelson, A.J.;
Asher, S.E.; Swartzlander, A.B.
Proc., 1990 ASC, in IEEE Trans. Magn. MAG-27(2): 1596-1599; Mar 1991.
- Terahertz Detectors Based on Superconducting Kinetic Inductance;
Grossman, E.N.; McDonald, D.G.; Sauvageau, J.E.
Proc., Second Intl. Symp. on Space Terahertz Technology; Feb 1991.
- Two-Dimensional Analysis of Microbolometer Arrays;
Grossman, E.N.; McDonald, D.G.; Sauvageau, J.E.
J. Appl. Phys. 68: 5409-5414; 1990.
- Analysis of the $\text{Yb}_2\text{Cu}_3\text{O}_x/\text{SiTiO}_3$ Interface as a Function of Post-Deposition Annealing Temperature;
Asher, S.E.; Nelson, A.J.; Mason, A.R.; Swartzlander, A.B.; Dhere, R.; Kasmerski, L.L.; Halbritter, J.;
Harvey, T.E.; Beall, J.A.; Ono, R.H.
Proc., AIP Conf., American Vacuum Society Fall Mtg., Oct 10-15, 1990, Boston, MA,
pp 205-211; 1990.
- Non-dissipative Quasiparticle Tunnel Currents in Superconducting Tunnel Junctions;
Hu, Q.; Mears, C.A.; Richards, P.L.; Lloyd, F.L.
Phys. Rev. Lett. 64: 2945; 1990.
- A 24 GHz Josephson Array Voltage Standard;
Hamilton, C.A.; Kautz, R.L.; Chieh, K.; Stieg, M.; Simmonds, M.; Arvin, W.
Summary, Conf. on Precision Electromagn. Meas., Jun 11-14, 1990, Ottawa, Canada, pp 40-41;
1990.
- Magnetization of Anisotropic Superconducting Grains;
Peterson, R.L.
J. Appl. Phys. 67: 6930-6933; 1990.
- Excess Low-Frequency Flux Noise in dc SQUIDS Incorporating NB/Al-OXIDE/Nb Josephson Junctions;
Huber, M.E.; Cromar, M.W.
Physica B 165 & 166: 77-78; 1990.
- Correlation of Flux States Generated by Optical Switching of a Superconducting Circuit;
Cunningham, C.E.; Park, G.S.; Cabrera, B.; Huber, M.E.
Physica B 165 & 166: 113-114; 1990.
- A Superconducting Tunnel Junction Receiver for 345 GHz;
Sutton, E.C.; Danchi, W.C.; Jaminet, P.A.; Ono, R.H.
J. Infrared Millimeter Waves 11(2): 133-150; 1990.

- Noise-Affected I-V Curves in Small Hysteretic Josephson Junctions;
Kautz, R.L.; Martinis, J.M.
Phys. Rev. B. 42(16): 9903-9937; Dec 1, 1990.
- Critical-Current Diffraction Patterns of Grain-Boundary Josephson Weak-Links;
Peterson, R.L.; Ekin, J.W.
Phys. Rev. B 42(13): 8014-8018; Nov 1, 1990.
- Fabrication of Ultra-Small Nb-AlO_x-Nb Josephson Tunnel Junctions;
Martinis, J.M.; Ono, R.H.
Appl. Phys. Lett. 57(6): 629-631; Aug 1990.
- Operation of NIST Josephson Array Voltage Standards;
Hamilton, C.A.; Burroughs, C.J.; Chieh, K.
NIST JRES 95(3): 219-235; May-Jun, 1990.
- Superconductivity and the Quantization of Energy;
McDonald, D.G.
Science 247: 177-182; Jan 12, 1990.
- Standard Flaws for Eddy Current Probe Characterizations;
Capobianco, T.E.; Ciciora, S.J.; Moulder, J.C.
Review of Progress in Quantitative Nondestructive Evaluation 8A: 985-989; 1989.
- Global Stability of the Chaotic State near an Interior Crisis;
Kautz, R.L.
in Structure, Coherence and Chaos in Dynamical Systems, Christiansen, P.L. and Parmentier, R.D, eds., (Manchester: Manchester Univ. Press) pp 207-226; 1989.
- Fabrication and Operation of a High-T_c Composite Bolometer;
Brasunas, J.C.; Moseley, S.H.; Lakew, B.; Ono, R.H.; McDonald, D.G.; Beall, J.A.; Sauvageau, J.
Appl. Phys. 66: 4551-4553; 1989.
- Superconducting Detector for Minimum Ionizing Particles;
Ono, R.H.; Gabutti, A.; Wagner, R.G.; Gray, K.E.; Kampwirth, R.T.
Nucl. Instrum. Methods; 1989.
- Microlithography and Patterning of High-T_c Thin Films;
Ono, R.H.; Beall, J.A.
Proc., Third Intl. Sample Electronic Materials and Processes Conf., Los Angeles, CA, p 352; 1989.
- Airy Pattern, Weak-Link Modeling of Critical Currents in High-T_c Superconductors;
Peterson, R.L.; Ekin, J.W.
Physica C 1577: 325-333; 1989.
- Granular-Aluminum Superconducting Detector for 6 keV X-rays and 2.2 MeV Beta Sources;
Gabutti, A.; Gray, K.E.; Wagner, R.G.; Ono, R.H.
Nucl. Instrum. Methods; 1989.
- Modeling of Critical Currents in Granular High-T_c Superconductors;
Peterson, R.L.; Ekin, J.W.
Proc., Magnetic Interactions of High T_c Superconductors 17: 190-195; 1989.

- Classical Phase Diffusion in Small Hysteretic Josephson Junctions;
 Martinis, J.M.; Kautz, R.L.
 Phys. Rev. Lett. 63(14):1507-1510; Oct 2, 1989.
- Kim Model for Magnetization of Type-II Superconductors;
 Chen, D.-X.; Goldfarb, R.B.
 J. Appl. Phys. 66(6): 2489-2500; Sep 15, 1989.
- Magnetization of Imperfect Superconducting Grains;
 Peterson, R.L.
 Phys. Rev. B 40(4); Aug 1, 1989.
- Standards and High Speed Instrumentation;
 Hamilton, C.A.; McDonald, D.G.; Sauvageau, J.E.; Whiteley, S.
 Proc., IEEE Special Issue on Superconductivity, 77(8):1224-1232; Aug 1989.
- A 10 V Josephson Voltage Standard;
 Hamilton, C.A.; Lloyd, F.L.; Chieh, K.; Goeke, K.
 IEEE Trans. Instrum. Meas. IM-38(2): 314-316; Apr 1989.
- NB Edge Junction Process for Submillimeter Wave SIS Mixers;
 Danchi, W.C.; Sutton, E.C.; Jaminet, P.A.; Ono, R.H.
 IEEE Trans. Magn. MAG-25(2): 1064-1067; Mar 1989.
- Noise in DC SQUIDS with Nb/Al-Oxide/Nb Josephson Junctions;
 Cromar, M.W.; Beall, J.A.; Go, D.; Masarie, K.A.; Ono, R.H.
 IEEE Trans. Magn. MAG-25(2): 1005-1007; Mar 1989.
- Chaos and Catastrophe near the Plasma Frequency in the RF-Biased Josephson Junction;
 Kautz, R.L.; Monaco, R.
 IEEE Trans. Magn. MAG-25(2): 1399-1403; Mar 1989.
- MM Wave Quasioptical SIS Mixers;
 Hu, Q.; Mears, C.A.; Richards, P.L.; Lloyd, F.L.
 IEEE Trans. Magn. MAG-25(2): 1380-1383; Mar 1989.
- Superconducting Kinetic Inductance Bolometer;
 Sauvageau, J.E.; McDonald, D.G.
 IEEE Trans. Magn. MAG-25(2): 1331-1334; Mar 1989.
- Switching Noise in $\text{YBa}_2\text{Cu}_3\text{O}_x$ Macrobridges;
 Ono, R.H.; Beall, J.A.; Cromar, M.W.; Mankiewich, P.M.; Howard, R.E.; Skocpol, W.
 IEEE Trans. Magn. MAG-25(2): 976-979; Mar 1989.
- Surface Analysis of Interfacial Properties for Thin Film and Bulk $\text{YBa}_2\text{Cu}_3\text{O}_7$;
 Ono, R.H.; Beall, J.A.; Ekin, J.W.; Nelson, A.J.; Kazmerski, L.L.; Mason, A.R.; Swartzlander, A.B.; McConnell, R.D.
 Proc., Second Conf. on Superconductivity and Applications, Apr 18-20, 1988, Buffalo, NY, 161-167; 1988.
- Superconducting Inductance Bolometer with Potential Photon-Counting Sensitivity: A Progress Report;
 Sauvageau, J.E.; McDonald, D.G.
 Inst. of Phys. Conf. Series 92: 39-46; 1988.

- SIS Quasiparticle Mixers with Bow-Tie Antennas;
Xizhi, L.; Richards, P.L.; Lloyd, F.L.
Intl. J. Infrared Millimeter Waves 9(2): 101-133; 1988.
- Measurement of Integrated Tuning Elements for SIS Mixers with a Fourier Transform Spectrometer;
Hu, Q.; Mears, C.A.; Richards, P.L.; Lloyd, F.L.
Intl. J. Infrared Millimeter Waves 9(4): 303-320; 1988.
- Single-Target Magnetron Sputter-Deposition of High- T_c Superconducting Bi-Sr-Ca-Cu-O Thin Films;
Dhere, N.G.; Goral, J.P.; Mason, A.R.; Dhere, R.G.; Ono, R.H.
J. Appl. Phys.; Nov 15, 1988.
- Thermally Induced Escape: The Principle of Minimum Available Noise Energy;
Kautz, R.L.
Phys. Rev. A 38(4): 2066-2080; Aug 15, 1988.
- Josephson Junction Model of Critical Current in Granular $Y_1Ba_2Cu_3O_{7.6}$;
Peterson, R.L.; Ekin, J.W.
Phys. Rev. 37(16): 9848-9851; Jun 1, 1988.
- Josephson ac Voltmeter;
Peterson, R.L.; Oldham, N.M.
J. Appl. Phys. 63(10): 4804-4810; May 5, 1988.
- Accurate Experimental and Theoretical Comparisons Between SIS Mixers Showing Weak and Strong Quantum Effects;
McGrath, W.R.; Richards, P.L.; Face, D.W.; Prober, D.E.; Lloyd, F.L.
J. Appl. Phys. 63(8): 2479-2491; Apr 15, 1988.
- Superconducting Analog Track-and-Hold Circuit;
Go, D.; Hamilton, C.A.; Lloyd, F.L.; DiIorio, M.S.; Withers, R.S.
IEEE Trans. Electron Dev. ED-35(4): 498-501; Apr 1988.
- Josephson-Voltage Array Development at the NBS in Boulder;
Hamilton, C.A.; Lloyd, F.L.; Burroughs, C.J.
Proc., NCSL Workshop & Symposium, Jul 12-16, 1987, Denver, CO, pp 50-1 to 50-5; 1987.
- A 100 GHz SIS Quasiparticle Mixer with 10 dB Coupled Gain;
Raisanen, A.V.; Crete, D.G.; Richards, P.L.; Lloyd, Frances L.
Proc., 1987 IEEE Intl. Microwave Symp., IEEE Trans. Microwave Theory Tech. MTT-S: 929; 1987.
- Precision of Series-Array Josephson Voltage Standards;
Kautz, R.L.; Lloyd, F.L.
Appl. Phys. Lett. 51(24): 2043-2045; Dec 14, 1987.
- Activation Energy for Thermally Induced Escape from a Basin of Attraction;
Kautz, R.L.
Phys. Lett. A 125(6,7): 315-319; Nov 23, 1987.
- A Josephson Array Voltage Standard at 10 Volts;
Lloyd, F.L.; Hamilton, C.A.; Beall, J.A.; Go, D.; Ono, R.H.; Harris, R.E.
Electron Dev. Lett. EDL-8(10): 449-450; Oct 10, 1987.

- Equivalent Flux Noise in a YBa_2CuO_x rf SQUID;
 Zimmerman, J.E.; Beall, J.A.; Cromar, M.W.; Ono, R.H.
 Proc., XVIII Intl. Conf. Low Temp. Phys., pp 2125-2126; Aug 1987.
- Operation of a $\text{YBa}_2\text{Cu}_3\text{O}_x$ rf-SQUID at 81 K;
 Zimmerman, J.E.; Beall, J.A.; Cromar, M.W.; Ono, R.H.
 Appl. Phys. Lett. 57(8): 617-618; Aug 24, 1987.
- Sinusoidal Response of dc SQUIDs for rf Power Measurements;
 Peterson, R.L.
 NBS JRES 92(4): 253-259; Jul-Aug 1987.
- Numerical Study of Currents and Fields in a Semiconducting Optical Detector;
 Peterson, R.L.
 IEEE J. Quant. Electron. QE-23(7): 1185-1192; Jul 1987.
- Global Stability of Phase Lock Near Chaotic Crisis in the rf-Biased Josephson Junction;
 Kautz, R.L.
 J. Appl. Phys. 62(1): 198-211; Jul 1, 1987.
- The NBS Josephson Array Voltage Standard;
 Hamilton, C.A.; Kautz, R.L.; Lloyd, F.L.; Steiner, R.L.; Field, B.F.
 IEEE Trans. Instrum. Meas. IM-36(2): 258-261; Jun 1987.
- Performance of Arrays of SIS Junctions in Heterodyne Mixers;
 Crete, D.G.; McGrath, W.R.; Richards, P.L.; Lloyd, F.L.
 IEEE Trans. Microwave Theory Tech. MTT-35(4): 435-440; Apr 1987.
- Phase Lock of a Long Josephson Junction to an External Microwave Source;
 Cirillo, M.; Lloyd, F.L.
 J. Appl. Phys. 61(7): 2581-2585; Apr 1, 1987.
- Novel Superconducting Thermometer for Bolometric Applications;
 McDonald, D.G.
 Appl. Phys. Lett. 50(12): 775-777; Mar 23, 1987.
- Current-Voltage Characteristics of Nanoampere Josephson Junctions;
 Ono, R.H.; Cromar, M.W.; Kautz, R.L.; Soulen, R.J.; Colwell, J.H.; Fogle, W.E.
 IEEE Trans. Magn. MAG-23(2): 1670-1673; Mar 1987.
- Series-Array Josephson Voltage Standards;
 Kautz, R.L.; Hamilton, C.A.; Lloyd, F.L.
 IEEE Trans. Magn. MAG-23(2): 883-890; Mar 1987.
- Wide-Band Low Noise mm-Wave SIS Mixers with a Single Tuning Element;
 Raisanen, A.V.; Crete, D.G.; Richards, P.L.; Lloyd, Frances L.
 Intl. J. Infrared Millimeter Waves 7(12): 1835-1852; 1986.
- Low Noise SIS Mixer with Gain for 80-115 GHz;
 Raisanen, A.V.; Crete, D.G.; Richards, P.L.; Lloyd, Frances L.
 Proc., European Space Agency, SP-260, p255; 1986.

- A Versatile Experimental Low Power 4 K Cryocooler;
Lambert, N.; Barbanera, S.; Zimmerman, J.E.
Cryogenics 28: 341-344; 1986.
- Cryogenic Instrumentation for Biomagnetic Measurements;
Zimmerman, J.E.
Proc., 4th Intl. Conf. on Biomagnetism; 1986.
- Modeling a Voltage-Locked Josephson Junction Array Amplifier: Gain, Input, Impedance, and Bandwidth;
McDonald, D.G.
J. Appl. Phys. 60(9): 3247-3257; Nov 1986.
- Very Low Noise, Tightly Coupled, dc SQUID Amplifiers;
Muhlfelder, B.; Beall, J.A.; Cromar, M.W.; Ono, R.
Appl. Phys. Lett. 49(17): 1118-1120; Oct 1986.
- High Accuracy in Physics;
McDonald, D.G.
Science, p 829; Aug 1986.
- Low Noise SIS Mixer with Gain for 80-115 GHz;
Lloyd, F.L.; Raisanen, A.V.; Crete, D.G.; Richards, P.L.
ESA Workshop on a Space Base Submillimeter Astronomy Mission; Jun 4-7, 1986; Segovia, Spain;
European Space Agency, Paris, France; Intl. J. Infrared and mm Waves; pp 255-258; Aug 1986.
- The NBS Josephson Array Voltage Standard;
Hamilton, C.A.; Kautz, R.L.; Lloyd, F.L.
1986 Digest, Conf. on Precision Electromagn. Meas., Jun 23-27, 1986; Gaithersburg, MD;
pp 108-109; Jun 1986.
- Flux Limit of Cosmic-Ray Magnetic Monopole from a Multiply Discriminating Superconductive Detector;
Cromar, M.; Clark, A.F.; Fickett, F.
Phys. Rev. Lett. 56(24): 2561-2563; Jun 1986.
- Onset of Chaos in the rf-Biased Josephson Junction;
Kautz, R.L.; McFarlane, J.C.
Phys. Rev. A 33(1): 498-509; Jan 1986.
- A Josephson Series Array Voltage Standard at One Volt;
Hamilton, C.A.; Lloyd, F.L.; Kautz, R.L.
NCSL 1985 Workshop and Symp.; Jul 15-18, 1985; Boulder, CO; pp 71-77; 1985.
- Broad-Band RF Match to a Millimeter-Wave SIS Quasi-Particle Mixer;
Raisanen, A.V.; McGrath, W.R.; Richards, P.L.; Lloyd, F.L.
IEEE Trans. Microwave Theory Tech. MTT-33(12): 1495-1500; Dec 1985.
- A Practical Josephson Voltage Standard at 1 V;
Hamilton, C.A.; Kautz, R.L.; Steiner, R.L.; Lloyd, F.L.
IEEE Electron Device Lett. EDL-6(12): 623-625; Dec 1985.
- Amplification by a Voltage Locked Array of Josephson Junctions;
McDonald, D.G.; Frederick, N.V.
Appl. Phys. Lett. 47(5): 530-532; 1 Sep 1985.

- Chaos and Thermal Noise in the rf-Biased Josephson Junction;
Kautz, R.L.
J. Appl. Phys. 58(1): 424-440; 1 Jul 1985.
- Near-Zero Bias Arrays of Josephson Tunnel Junctions Providing Standard Voltages Up to 1V;
Niemeyer, J.; Hinken, J.H.; Kautz, R.L.
IEEE Trans. Instrum. Meas. IM-34(2): 185-187; Jun 1985.
- Design of Cryocoolers for Microwatt Superconducting Devices;
Zimmerman, J.E.
Proc., Third Cryocooler Conf. on Refrigeration for Cryogenic Sensors & Electronic Systems; Sep 17-18, 1984; Boulder, CO; NBS SP 698, pp 2-9; May 1985.
- Well Coupled, Low Noise, dc SQUIDS;
Muhlfelder, B.; Beall, J.A.; Cromar, M.; Ono, R.; Johnson, W.
Proc., Applied Superconductivity Conf.; Sep 10-13, 1984; San Diego, CA; IEEE Trans. Magn. MAG-21(2): 427-429; Mar 1985.
- Fabrication of a Miniaturized DCL Gate;
Ono, R.; Beall, J.; Harris, R.E.
Proc., Applied Superconductivity Conf., Sep 10-13, 1984; San Diego, CA; IEEE Trans. Magn. MAG-21(2): 846-849; Mar 1985.
- Accurate Noise Measurements of Superconducting Quasiparticle Array Mixers;
McGrath, W.R.; Raisanen, A.V.; Richards, P.L.; Harris, R.E.; Lloyd, F.L.
Proc., Applied Superconductivity Conf.; Sep 10-13, 1984; San Diego, CA; IEEE Trans. Magn. MAG-21(2): 212-215; Mar 1985.
- Superconducting A/D Converter Using Latching Comparators;
Hamilton, C.A.; Lloyd, F.L.; Kautz, R.L.
Proc., Applied Superconductivity Conf.; Sep 10-13, 1984; San Diego, CA; IEEE Trans. Magn. MAG-21(2): 197-199; Mar 1985.
- Survey of Chaos in the rf-Biased Josephson Junction;
Kautz, R.L.; Monaco, R.
J. Appl. Phys. 57(3): 875-889; Feb 1985.
- Recent Developments in Low-Power Self-Contained Cryocoolers for SQUIDS;
Zimmerman, J.E.
Proc., Intl. Cryogenic Engineering Conf.; Aug 1-4, 1984; Helsinki, Finland; Butterworth, pp 13-19; 1984.
- High Speed Superconducting A/D Converter;
Hamilton, C.A.; Lloyd, F.L.; Kautz, R.L.
Proc., 1984 Government Microcircuit Applications Conf.; Nov 6-8, 1984; Las Vegas, NV; pp 140-143; 1984.
- Millimeter Wave Induced Josephson Voltage Steps above 1.0 Volt with a 1474 Junctions Array;
Niemeyer, J.; Hinken, J.H.; Kautz, R.L.
Proc. of the 17th Intl. Conf. on Low Temp. Phys., Aug 15-22, 1984, Karlsruhe, Germany, pp 413-414; 1984.

- Amplification by the Phase-Locking Mechanism in a 4-Junction SQUID;
McDonald, D.G.
Appl. Phys. Lett. 45(11): 1243-1245; Dec 1, 1984.
- Microwave-Induced Constant-Voltage Steps at One Volt From a Series Array of Josephson Junctions;
Niemeyer, J.; Hinken, J.H.; Kautz, R.L.
Appl. Phys. Lett. 45(4): 478-480; Aug 1984.
- Power Gain of a SQUID Amplifier;
McDonald, D.G.
Appl. Phys. Lett. 44(5): 556-558; Mar 1984.
- Magnetic Quantities, Units, Materials, and Measurements;
Zimmerman, J.E.
Chapt. 2 in Biomagnetism: An Interdisciplinary Approach, Samuel J. Williamson, et al., eds.,
NATO Advanced Study Institute Publication, Vol. 66, New York: Plenum Press, pp 17-42; 1983.
- Cryogenics;
Zimmerman, J.E.
Chapt. 3 in Biomagnetism: An Interdisciplinary Approach, Samuel J. Williamson, et al., eds.,
NATO Advanced Study Institute Publication, Vol. 66, New York: Plenum Press, pp 43-67; 1983.
- An Approach to Optimization of Low-Power Stirling Cryocoolers;
Sullivan, D.B.
Proc., 2nd Biennial Conf. Refrigeration for Cryogenic Sensors; Dec 7-8, 1982; Greenbelt, MD;
NASA Conf. Publ. 2287, pp 95-106; Dec 1983.
- A Cryocooler for Applications Requiring Low Magnetic and Mechanical Interference;
Zimmerman, J.E.; Daney, D.E.; Sullivan, D.B.
NASA Pub. 2287, pp 95-106; Dec 1983.
- 100 GHz Binary Counter Using SQUID Flip Flops;
Hamilton, C.A.
Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 1291-1291; May 1983.
- Double Transformer Coupling to a Very Low Noise SQUID;
Cromar, M.; Muhlfelder, B.
Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 303-307; May 1983.
- Chaos in Josephson Circuits;
Kautz, R.L.
Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 465-473; May 1983.
- Operation of a Superconducting Analog-to-Digital Converter at Short Conversion Times;
Kautz, R.L.
Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 1186-1189; May 1983.
- 8-Bit Superconducting A/D Converter;
Hamilton, C.A.; Lloyd, F.L.
Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 1259-1261; May 1983.

- Summary of the Proceedings of the 2nd Biennial Conference on Refrigeration for Cryogenic Sensors;
 Zimmerman, J.E.
 Cryogenics 23(5): 281-282; May 1983.
- Microwave Mixing and Direct Detection Using SIS and SIS' Quasiparticle Tunnel Junctions;
 Harris, R.E.; et al.
 Proc., Applied Superconductivity Conf., IEEE Trans. Magn. MAG-19(3): 490-493; May 1983.
- Superconducting Current Injection Transistor;
 VanZeghbroeck, B.J.
 Appl. Phys. Lett. 42(8): 736-738; Apr 1983.
- Voltage and Current Expressions for a Two-Junction Superconducting Interferometer;
 Peterson, R.L.; McDonald, D.G.
 J. Appl. Phys. 54(2): 992-996; Feb 1983.
- 100 GHz Binary Counter Based on DC SQUIDS;
 Hamilton, C.A.
 IEEE Electron Dev. Lett. EDL-3(11): 335-338; Nov 1982.
- Electronically Adjustable Delay for Josephson Technology; ;
 Harris, R.E.; Wolf, P.; Moore, D.F.
 IEEE Electron Dev. Lett. EDL-3(9); Sep 1982.
- High-Speed, Low-Crosstalk Chip Holder for Josephson Integrated Circuits;
 Hamilton, C.A.
 IEEE Trans. Instrum. Meas. IM-31(2): 29; Jun 1982.
- Book review: Principles of Superconductive Devices and Circuits, by T. Van Duzer and C.W. Turner;
 McDonald, D.G.; Clark, A.F.
 Phys. Today, p 1980; Feb 1982.
- A Study of Design Principles for Refrigerators for Low-Power Cryoelectronic Devices;
 Zimmerman, J.E.; Sullivan, D.B.
 NBS TN 1049; Jan 1982.
- Superconducting Electronics;
 McDonald, D.G.
 Phys. Today 34: 36-47; 1981.
- Magnetic Auditory Evoked Fields: Interhemispheric Asymmetry;
 Reite, M.; Zimmerman, J.T.; Zimmerman, J.E.
 Electroencephalogr. Clin. Neurophys. 51: 388-392; 1981.
- A Josephson Voltage Standard Using a Series Array of 100 Junctions;
 Kautz, R.L.; Costabile, G.
 IEEE Trans. Magn. MAG-17: 780; 1981.
- Mathematical Modelling of the Impedance of a Josephson Junction Noise Thermometer;
 Peterson, R.L.
 J. Appl. Phys. 52(12): 7321-7326; Dec 1981.

- Design Limitations for Superconducting A/D Converters;
Hamilton, C.A.; Lloyd, F.L.
IEEE Trans. Magn. MAG-17(6): 3414-3419; Nov 1981.
- Chaotic States of rf-Biased Josephson Junctions;
Kautz, R.L.
J. Appl. Phys. 52(10): 6241-6246; Oct 1981.
- Modelling the Impedance of a Josephson Junction Noise Thermometer;
Peterson, R.L.; Van Vechten, D.
Phys. Rev. B 24(6): 3588-3591; Sep 1981.
- Refrigeration for Cryogenic Sensors and Electronic Systems;
Zimmerman, J.E.; Sullivan, D.B.; McCarthy, S.M., eds.
NBS SP 607; May 1981.
- Measurement of Thermal Properties of Cryocooler Materials;
Zimmerman, J.E.; Sullivan, D.B.; Kautz, R.L.; Hobbs, R.D.
Proc., Conf. Refrigeration for Cryogenic Sensors and Electronic Systems; NBS SP 607,
pp 173-177; May 1981.
- Low Noise Tunnel Junction dc SQUIDS;
Cromar, M.W.; Carelli, P.
Appl. Phys. Lett. 38(9): 723-725; May 1981.
- The ac Josephson Effect in Hysteric Junctions: Range and Stability of Phase Lock;
Kautz, R.L.
J. Appl. Phys. 52(5): 3528-3541; May 1981.
- Operation of a Practical SQUID Gradiometer in a Low-Power Stirling Cryocooler;
Sullivan, D.B.; Zimmerman, J.E.; Ives, J.T.
Proc., Conf. Refrigeration for Cryogenic Sensors and Electronic Systems; NBS SP 607,
pp 186-194; May 1981.
- Analog Measurement Applications for High Speed Josephson Switches;
Hamilton, C.A.; Lloyd, F.L.; Kautz, R.L.
IEEE Trans. Magn. MAG 17(1): 577-582; Jan 1981.
- Turn-On Delays in Single Josephson Junction Devices;
Peterson, R.L.
Proc., 2nd Intl. Conf. on Superconducting Quantum Interference Devices (SQUIDS), H.D.
Wahlbohm; H. Lubbig, eds., New York; Berlin: Walter de Gruyter & Co., 685-702; 1980.
- Transient Pool Boiling of Liquid Helium Using a Temperature Controlled Heater Surface;
Giarratano, P.J.; Frederick, N.V.
Adv. Cryo. Eng., K.D. Timmerhaus; H.A. Synder, eds., New York: Plenum Press, 25: 455-466;
1980.
- Recent Progress in Cryoelectronics;
Sullivan, D.B.; Hamilton, C.A.; Kautz, R.L.
IEEE Trans. Instrum. Meas. IM-29: 319; 1980.

- Behavior of the dc Impedance of an rf-Biased Resistive SQUID;
 Van Vechten, D.; Soulen, R.J.; Peterson, R.L.
 Proc., 2nd Intl. Conf. on Superconducting Quantum Interference Devices (SQUIDs), H.D. Wahlbohm; H. Lubbig, eds., New York, Berlin: Walter de Gruyter & Co., pp 569-584; 1980.
- Space Applications of Superconductivity: Digital Electronics;
 Harris, R.E.
 Cryogenics 20: 115; 1980.
- Cryogenics for SQUIDs;
 Zimmerman, J.E.
 Proc., 2nd Intl. Conf. on Superconducting Quantum Interference Devices (SQUIDs), H.D. Wahlbohm; H. Lubbig, eds. New York, Berlin: Walter de Gruyter & Co., pp 423-443; 1980.
- Picosecond Applications of Josephson Junctions;
 McDonald, D.G.; Peterson, R.L.; Hamilton, C.A.; Harris, R.E.; Kautz, R.L.
 IEEE Trans. Electron Dev. ED-27(10): 1945-1965; Oct 1980.
- Induced Electronic Currents in the Alaska Oil Pipeline Measured by Gradient Fluxgate and SQUID Magnetometers;
 Campbell, W.H.; Zimmerman, J.E.
 IEEE Trans. Geosci. Remote Sensing GE-18(3): 244-250; Jul 1980.
- Space Applications of Superconductivity: Instrumentation for Gravitational and Related Studies;
 Peterson, R.L.
 Cryogenics pp 299-306; Jun 1980.
- Cryocoolers for Geophysical SQUID Magnetometers;
 Zimmerman, J.E.
 Proc., SQUID Geophysics Workshop, Los Alamos, NM; Jun 1980.
- Conversion Gain in mm-Wave Quasiparticle Heterodyne Mixers;
 Shen, T.M.; Richards, P.L.; Harris, R.E.; Lloyd, F.L.
 Appl. Phys. Lett. 36: 777-779; May 1980.
- Space Applications of Superconductivity: Microwave and Infrared Detectors;
 Hamilton, C.A.
 Cryogenics pp 235-243; May 1980.
- A Superconducting 6-bit Analog-to-Digital Converter with Operation to 2×10^9 Samples/Second;
 Hamilton, C.A.; Lloyd, F.L.
 IEEE Electron Dev. Lett. EDL-1(5): 92-94; May 1980.
- Simple-Heating-Induced Josephson Effects in Quasiparticle-Injected Superconducting Weak Links;
 Kaplan, S.B.
 J. Appl. Phys. 51(3): 1682-1685; Mar 1980.
- Superconductor Insulator-Superconductor Quasiparticle Junctions as Microwave Photon Detectors;
 Richards, P.L.; Shen, T.M.; Harris, R.E.; Lloyd, F.L.
 Appl. Phys. Lett. 36: 480-482; Mar 1980.

- On a Proposed Josephson-Effect Voltage Standard at Zero Current Bias;
Kautz, R.L.
Appl. Phys. Lett. 36(5): 386-388; Mar 1980.
- Space Applications of Superconductivity: Low Frequency Superconducting Sensors;
Zimmerman, J.E.
Cryogenics pp 3-10; Jan 1980.
- Acoustic Matching of Superconducting Films to Substrates;
Kaplan, S.B.
J. Low Temp. Phys. 37: 343-365; 1979.
- Superconducting Devices;
Zimmerman, J.E.; Sullivan, D.B.
Yearbook of Science and Technology, McGraw-Hill; 1979.
- Quasiparticle Heterodyne Mixing in SIS Tunnel Junctions;
Richards, P.L.; Shen, T.M.; Harris, R.E.; Lloyd, F.L.
Appl. Phys. Lett. 34: 345; 1979.
- A Milliwatt Stirling Cryocooler for Temperatures below 4 K;
Zimmerman, J.E.; Sullivan, D.B.
Cryogenics 19: 170; 1979.
- Miniaturization of Normal-State and Superconducting Strip-Lines;
Kautz, R.L.
NBS JRES 84: 247; 1979.
- Analysis of Threshold Curves for Superconducting Interferometers;
Peterson, R.L.; Hamilton, C.A.
J. Appl. Phys. 50(12): 8135-8142; Dec 1979.
- A Superconducting Sampler for Josephson Logic Circuits;
Hamilton, C.A.; Lloyd, F.L.; Peterson, R.L.; Andrews, J.R.
Appl. Phys. Lett. 35: 718; Nov 1979.
- Multiple-Quantum Interference Superconducting Analog-to-Digital Converter;
Harris, R.E.; Hamilton, C.A.; Lloyd, F.L.
Appl. Phys. Lett. 35: 720; Nov 1979.
- Space Applications of Superconductivity;
Sullivan, D.B.; Vorreiter, J.W.
Cryogenics 19: 627-631; Nov 1979.
- Very Low-Power Stirling Cryocoolers Using Plastic and Composite Materials;
Sullivan, D.B.; Zimmerman, J.E.
Intl. J. Refrig. 2: 211-213; Nov 1979.
- Differential Capacitance Sensor as Position Detectors for Magnetic Suspension Densimeter;
Frederick, N.V.
Rev. Sci. Instrum. 50(9): 1154; Sep 1979.

- Analog to Digital Conversion with a SQUID: Conditions for a Countable Pulse Train;
 Peterson, R.L.
 J. Appl. Phys. 50: 4231; Jun 1979.
- Sampling Circuit and Method Therefor;
 Hamilton, C.A.
 PAT-APPL-6-020 359; Filed 14 Mar 1979.
- Cryogenic Refrigeration System;
 Zimmerman, J.E.
 PATENT 4 143 520; patented 13 Mar 1979.
- Quasiparticle Heterodyne Mixing in SIS Tunnel Junctions;
 Harris, R.E.; Lloyd, F.L.; Richards, P.L.; Shen, T.M.
 Appl. Phys. Lett. 34(5): 345-347; Mar 1979.
- Attenuation in Superconducting Striplines;
 Kautz, R.L.
 IEEE Trans. Magn. MAG-15: 566-569; Jan 1979.
- High-Speed Superconducting Electronics;
 Hamilton, C.A.; Harris, R.E.; Sullivan, D.B.
 GOMAC Digest, Vol. 7; 1978.
- Magnetic Phenomena of the Central Nervous System;
 Reite, M.; Zimmerman, J.E.
 Ann. Rev. Biophys. Bioeng. 7: 167-188; 1978.
- Human Magnetic Auditory Evoked Responses;
 Reite, M.; Edrich, J.; Zimmerman, J.T.; Zimmerman, J.E.
 Electroencephalogr. Clin. Neurophys. 45: 114-117; 1978.
- Multiple Magnetic Flux Entry into SQUIDS: A General Way of Examining the $\cos(\phi)$ Conductance;
 Peterson, R.L.; Gayley, R.I.
 Phys. Rev. B 18: 1198-1206; Aug 1978.
- The Role of Superconductivity in the Space Program: An Assessment of Present Capabilities and Future Potential;
 Sullivan, D.B.
 NBSIR 78-885; May 1978.
- Automatic 300-4 K Temperature Cycling Apparatus;
 Hamilton, C.A.
 Rev. Sci. Instrum. Notes 49: 674-677; May 1978.
- RF Instrumentation Based on Superconducting Quantum Interference;
 Sullivan, D.B.; Adair, R.T.; Frederick, N.V.
 Proc., IEEE 66: 454-463; Apr 1978.
- Applications of Closed-Cycle Cryocoolers to Small Superconducting Devices; ;
 Zimmerman, J.E.; Flynn, T.M.
 Proc., Conf. held by the Office of Naval Research and the National Bureau of Standards, Oct 3-4, 1977; Boulder, CO; NBS SP 508; Apr 1978.

- Photolithographic Fabrication of Lead Alloy Josephson Junctions;
 Havemann, R.H.; Hamilton, C.A.; Harris, Richard E.
 J. Vac. Sci. Tech. 15: 392-395; Mar/Apr 1978.
- Picosecond Pulses on Superconducting Striplines;
 Kautz, R.L.
 J. Appl. Phys. 49: 308-314; Jan 1978.
- RF Power Measurements Using Quantum Interference in Superconductors;
 Sullivan, D.B.; Frederick, N.V.; Adair, R.T.
 Proc., IC SQUID (1st), Oct 5-8, 1976; Berlin, Germany; Paper R-1045 in Superconducting
 Quantum Interference Devices and Their Applications, pp 355-363; 1977.
- Superconducting Devices for Metrology and Standards;
 Kamper, R.A.
 Chap. 5 in Superconductor Applications: Squids and Machines, New York: Plenum Press,
 pp 189-247; 1977.
- Possible Cryocoolers for SQUID Magnetometers;
 Zimmerman, J.E.; Radebaugh, R.; Siegwarth, J.D.
 Proc., 1st IC SQUID Conf., Oct 5-8, 1976; Berlin, Germany, Paper R-1044 in Superconducting
 Quantum Interference Devices and Their Applications, pp 287-296; 1977.
- Results, Potentials and Limitations of Josephson Mixer-Receivers at Millimeter and Long Submillimeter
 Wavelengths;
 Edrich, J.; Sullivan, D.B.; McDonald, D.G.
 IEEE Trans. Microwave Theory Tech. MTT-25: 476; 1977.
- Numerical Evaluation of the Response of a Josephson Tunnel Junction in an Arbitrary Circuit;
 Harris, R.E.
 J. Appl. Phys. 48: 5188-5190; Dec 1977.
- Design of a Josephson-Junction Picosecond Pulser;
 McDonald, D.G.; Peterson, R.L.; Bender, B.K.
 J. Appl. Phys. 48: 5366-5369; Dec 1977.
- Picosecond Pulse Generator Utilizing a Josephson Junction;
 McDonald, D.G.; Peterson, R.L.
 PAT-APPL-862 311; Filed 20 Dec 1977.
- A Sampling Circuit and Method Therefor;
 Hamilton, C.A.
 PAT-APPL-853 354; Filed 21 Nov 1977.
- High-Frequency Limitations of the Double-Junction SQUID Amplifier;
 Zimmerman, J.E.; Sullivan, D.B.
 Appl. Phys. Lett. 31: 360-362; Sep 1977.
- RF Attenuation Measurement System Using a SQUID;
 Adair, R.T.; Frederick, N.V.; Sullivan, D.B.
 NBSIR 77-863; Sep 1977.

- A Low-Noise Josephson Mixer for the 1 mm Wavelength Range;
Edrich, J.; Sullivan, D.B.; McDonald, D.G.
IEEE Trans. Microwave Theory Tech. MTT-25: 476-479; Jun 1977.
- SQUID Instruments and Shielding for Low-Level Magnetic Measurements;
Zimmerman, J.E.
J. Appl. Phys. 48: 702-710; Feb 1977.
- Advances in the Use of SQUIDS for RF Attenuation Measurement;
Frederick, N.V.; Sullivan, D.B.; Adair, R.T.
IEEE Trans. Magn. MAG-13: 361-364; Jan 1977.
- Can Superconductivity Contribute to the Determination of the Absolute Ampere?;
Sullivan, D.B.; Frederick, N.V.
IEEE Trans. Magn. MAG-13: 396-399; Jan 1977.
- Analog Computer Studies of Frequency Multiplication and Mixing with the Josephson Junction;
Risley, A.S.; Johnson, E.G., Jr.; Hamilton, C.A.
Proc., 1976 Applied Superconductivity Conf.; Stanford, CA; IEEE Trans. Magn. MAG-13: 381-384; Jan 1977.
- Picosecond Pulses from Josephson Junctions: Phenomenological and Microscopic Analyses;
Peterson, R.L.; McDonald, D.G.
IEEE Trans. Magn. MAG-13: 887-890; Jan 1977.
- The Human Magnetoencephalogram: Some EEG and Related Correlations;
Reite, M.; Zimmerman, J.E.; Edrich, J.; Zimmerman, J.T.
Electroencephalogr. Clin. Neurophys. 40: 59-66; 1976.
- Refrigeration for Small Superconducting Devices;
Zimmerman, J.E.; Radebaugh, R.; Siegwarth, J.D.
DKV Annual Meeting and Joint Meeting with the Intl. Institute of Refrigeration; Oct 13, 1976;
Munich, Germany; Rpt. No. CONF-7610104-1; 1976.
- Strong-Coupling Correction to the Low-Frequency Electrical Conductivity of Superconductors and Josephson Junctions;
Harris, R.E.; Ginsberg, D.M.; Dynes, R.C.
Phys. Rev. B 14: 990-992; Aug 1976.
- Strong-Coupling Correction to the Jump in the Quasiparticle Current of a Superconducting Tunnel Junction;
Harris, R.E.; Dynes, R.C.; Ginsberg, D.M.
Phys. Rev. B 14: 993-995; Aug 1976.
- Intrinsic Response Time of a Josephson Tunnel Junction;
Harris, R.E.
Phys. Rev. B 13: 3818-3821; May 1976.
- RF Applications of the Josephson Effect;
Kamper, R.A.
Microwave J. 19: 39-41; Apr 1976.

- Modeling Josephson Junctions;
McDonald, D.G.; Johnson, E.G., Jr.; Harris, R.E.
Phys. Rev. B 13: 1028-1031; Feb 1976.
- Josephson Weak-Link Devices;
Silver, A.H.; Zimmerman, J.E.
Appl. Supercond., V.L. Newhouse, ed., Academic Press, pp 1-80; 1975.
- Accurate Rotational Constants, Frequencies, and Wavelengths from $^{12}\text{C}^{16}\text{O}_2$ Lasers Stabilized by Saturated Absorption;
Petersen, F.R.; McDonald, D.G.; Cupp, J.D.; Danielson, B.L.
Proc., Laser Spectroscopy Conf.; Jun 25-29, 1973; Vail, CO, pp 555-569; 1975.
- Tests of Cryogenic SQUID for Geomagnetic Field Measurements;
Zimmerman, J.E.; Campbell, W.H.
Geophysics 40: 269; 1975.
- Phase Slip, Dissipation, Bernoulli Effect, Parametric Capacitance, and Other Curious Features of the Josephson Effect;
Zimmerman, J.E.
IEEE Trans. Magn. MAG-11: 852-855; Mar 1975.
- Cryogenic Direct Current Comparators and their Applications;
Dziuba, R.F.; Sullivan, D.B.
IEEE Trans. Magn. MAG-11: 716-719; Mar 1975.
- Review of Superconducting Electronics;
Kamper, R.A.
IEEE Trans. Magn. MAG-11: 141-146; Mar 1975.
- The Relationship of Josephson Junctions to a Unified Standard of Length and Time;
McDonald, D.G.; Risley, A.S.; Cupp, J.D.
Proc., 13th Intl. Conf. Low Temperature Physics; Aug 21-25, 1972; Boulder, CO; in Low Temperature Physics LT-13: 542-549; 1974.
- Review of Electromagnetic Measurements Using the Josephson Effect;
Kamper, R.A.
Proc., ISA Intl. Instrumentation-Automation Conf.; Oct 28-31, 1974; New York, NY, pp 1-8; 1974.
- RF Attenuation Measurements Using Quantum Interference in Superconductors;
Adair, R.T.; Hoer, C.A.; Kamper, R.A.; Simmonds, M.B.
Digest, Conf. on Precision Electromagn. Meas., IEE, London, England, pp 4-5; 1974.
- Magnetic Properties of Internally Oxidized Copper;
Fickett, F.R.; Sullivan, D.B.
19th Annual Conf. Magnetism and Magnetic Materials; 1973; Boston, MA; AIP Conf. Proc., p 18; 1974.
- A Low-Temperature Direct-Current Comparator Bridge;
Sullivan, D.B.; Dziuba, R.F.
IEEE Trans. Instrum. Meas. IM-23: 256-260; Dec 1974.

- RF Attenuation Measurements Using Quantum Interference in Superconductors;
Adair, R.T.; Simmonds, M.B.; Kamper, R.A.; Hoer, C.A.
IEEE Trans. Instrum. Meas. IM-23: 375-381; Dec 1974.
- Advances in the Measurement of rf Power and Attenuation Using SQUIDS;
Kamper, R.A.; Simmonds, M.B.; Adair, R.T.; Hoer, C.A.
NBS TN 661; Sep 1974.
- Josephson Junctions as Radiation Detectors from Millihertz to Terahertz;
McDonald, D.G.
IEEE J. Quantum Electron. QE-10: 776-777; Sep 1974.
- An Application of Superconducting Quantum Interference Magnetometers to Geophysical Prospecting;
Frederick, N.V.; Stanley, W.D.; Zimmerman, J.E.; Dinger, R.J.
IEEE Trans. Geosci. Electron. GE-12: 102-103; Jul 1974.
- Magnetic Studies of Oxidized Impurities in Pure Copper Using a SQUID System;
Fickett, F.R.; Sullivan, D.B.
J. Phys. F 4: 900-904; Jun 1974.
- Josephson Junctions at 45 Times the Energy-Gap Frequency;
McDonald, D.G.; Petersen, F.R.; Cupp, J.D.; Danielson, B.L.; Johnson, E.G., Jr.
Appl. Phys. Lett. 24: 335-337; Apr 1974.
- Low Temperature Direct Current Comparators;
Sullivan, D.B.; Dziuba, R.F.
Rev. Sci. Instrum. 45: 517-519; Apr 1974.
- Superconducting Devices and Materials;
Olien, N.A.; Goree, W.S.; Kamper, R.A.; Nisenoff, M.; Wolf, S.A.
Quarterly Literature Survey, No. 74-1, NBS Cryogenic Data Center, Boulder, CO; Jan-Mar 1974.
- Field-Usable Sharpless Wafers for Josephson Effect Devices at Millimeter Waves;
Edrich, J.; Cupp, J.D.; McDonald, D.G.
Revue de Physique Appliquée 9: 195-197; Jan 1974.
- Spectral Analysis of a Phase Locked Laser at 891 GHz: An Application of Josephson Junctions in the Far Infrared;
Wells, J.S.; McDonald, D.G.; Risley, A.S.; Jarvis, S.; Cupp, J.D.
Revue de Physique Appliquée (Supplement to J. de Physique), France, 9: 285-292; Jan 1974.
- Measurement of rf Power and Attenuation Using Superconducting Quantum Interference Devices;
Kamper, R.A.; Simmonds, M.B.; Hoer, C.A.; Adair, R.T.
NBS TN 643; Aug 1973.
- Rotational Constants for $^{12}\text{C}^{16}\text{O}_2$ From Beats Between Lamb-Dip-Stabilized Lasers;
Petersen, F.R.; McDonald, D.G.; Cupp, J.D.; Danielson, B.L.
Phys. Rev. Lett. 31: 573-576; Aug 1973.
- Analog-Computer Studies of Mixing and Parametric Effects in Josephson Junctions;
Hamilton, C.A.
J. Appl. Phys. 44: 2371-2377; May 1973.

- Portable Helium Dewars for Use with Superconducting Magnetometers;
 Zimmerman, J.E.; Siegwarth, J.D.
 Cryogenics 13: 158-159; Mar 1973.
- A New Technique for RF Measurements Using Superconductors;
 Kamper, R.A.; Simmonds, M.B.; Adair, R.T.; Hoer, C.A.
 Proc., IEEE 61: 121-122; Jan 1973.
- Flexible Laminates for Thermally Grounded Terminal Strips and Shielded Electrical Leads at Low Temperatures;
 Radebaugh, R.; Frederick, N.V.; Siegwarth, J.D.
 Cryogenics 13: 41-43; Jan 1973.
- Possible Parametric Capacitance in Josephson Junctions;
 Zimmerman, J.E.
 Phys. Lett. 42A: 375-376; Jan 1973.
- Superconducting Devices and Materials;
 Goree, W.S.; Nisenoff, M.; Wolf, S.A.; Kamper, R.A.; Olien, N.A.
 Quarterly Literature Survey, No. 73-1, NBS Cryogenic Data Center; Boulder, CO; Jan-Mar 1973.
- A Review of the Properties and Applications of Superconducting Point Contacts;
 Zimmerman, J.E.
 Proc., Applied Superconductivity Conf.; May 1-3, 1972; Annapolis, MD; pp 544-561; 1972.
- Precise Electrical Measurements at Low Temperature;
 Sullivan, D.B.
 Proc., Applied Superconductivity Conf.; May 1-3, 1972; Annapolis, MD; pp 631-639; 1972.
- Quantum Mechanical Measurement of rf Attenuation;
 Kamper, R.A.; Simmonds, M.B.; Adair, R.T.; Hoer, C.A.
 Proc., Applied Superconductivity Conf.; May 1-3, 1972; Annapolis, MD; pp 696-700; 1972.
- Developments in Cryoelectronics;
 Kamper, R.A.; Sullivan, D.B.
 NBS TN 630; Nov 1972.
- Superconducting Quantum Interference Devices: An Operational Guide for rf-Biased Systems;
 Sullivan, D.B.
 NBS TN 629; Nov 1972.
- Computation of Spectral Data for a Josephson Junction Circuit;
 Johnson, E.G., Jr.; McDonald, D.G.
 NBS TN 627; Nov 1972.
- Analog Computer Studies of Subharmonic Steps in Superconducting Weak Links;
 Hamilton, C.A.; Johnson, E.G., Jr.
 Phys. Lett. A 41: 393-394; Oct 1972.
- Four-Hundredth-Order Harmonic Mixing of Microwave and Infrared Laser Radiation Using a Josephson Junction and a Maser;
 McDonald, D.G.; Risley, A.S.; Cupp, J.D.; Evenson, K.M.; Ashley, J.R.
 Appl. Phys. Lett. 20: 296-299; Apr 1972.

- Broadband Superconducting Quantum Magnetometer;
Kamper, R.A.; Simmonds, M.B.
Appl. Phys. Lett. 20: 270-272; Apr 1972.
- Low Temperature Voltage Divider and Null Detector;
Sullivan, D.B.
Rev. Sci. Instrum. 43: 499-505; Mar 1972.
- Superconducting Devices and Materials;
Goree, W.S.; Kamper, R.A.; Olien, N.A.
Quarterly Literature Survey, NBS Cryogenic Data Center; Boulder, CO; 4 issues; Mar 1972.
- Josephson Effect Devices and Low-Frequency Field Sensing;
Zimmerman, J.E.
Cryogenics 12: 19-31; Feb 1972.
- A Mechanical Superconducting Switch for Low Temperature Instrumentation;
Siegwarth, J.D.; Sullivan, D.B.
Rev. Sci. Instrum. 43: 153-154; Jan 1972.
- Superconducting Materials;
Kamper, R.A.
Electron. Design Materials, 71-79; 1971.
- Survey of Noise Thermometry;
Kamper, R.A.
Proc., 5th Symp. Temperature, Its Measurement and Control in Science and Industry; Jun 21-24, 1971; Washington, DC; 1971.
- Mechanical Analogs of Time Dependent Josephson Phenomena;
Sullivan, D.B.; Zimmerman, J.E.
Amer. J. Phys. 39: 1504-1517; Dec 1971.
- Sensitivity Enhancement of Superconducting Quantum Interference Devices through the Use of Fractional-Turn Loops;
Zimmerman, J.E.
J. Appl. Phys. 24: 4483-4487; Oct 1971.
- Observation of Noise Temperature in the Millikelvin Range;
Kamper, R.A.; Siegwarth, J.D.; Radebaugh, R.; Zimmerman, J.E.
Proc., IEEE 59: 1368-1369; Sep 1971.
- Miniature Ultrasensitive Superconducting Magnetic Gradiometer and Its Use in Cardiology and Other Applications;
Zimmerman, J.E.; Frederick, N.V.
Appl. Phys. Lett. 19: 16-19; Jul 1971.
- Resistance of a Silicon Bronze at Low Temperatures;
Sullivan, D.B.
Rev. Sci. Instrum. 42: 612-613; May 1971.
- Harmonic Mixing of Microwave and Far-Infrared Laser Radiation Using a Josephson Junction;
McDonald, D.G.; Risley, A.S.; Cupp, J.D.; Evenson, K.M.
Appl. Phys. Lett. 18: 162-164; Feb 1971.

- Recent Developments in Superconducting Devices;
Zimmerman, J.E.
J. Appl. Phys. 42: 30-37; Jan 1971.
- High-Frequency Limit of the Josephson Effect;
McDonald, D.G.; Evenson, K.M.; Wells, J.S.; Cupp, J.D.
J. Appl. Phys. 42: 179-181; Jan 1971.
- Noise Thermometry with the Josephson Effect;
Kamper, R.A.; Zimmerman, J.E.
J. Appl. Phys. 42: 132-136; Jan 1971.
- Cryoelectronics;
Kamper, R.A.
Proc., Helium Society Symp.; Mar 23-24, 1970; Washington, DC; pp 68-82; 1970.
- Generation of Harmonics and Subharmonics of the Josephson Oscillation;
Sullivan, D.B.; Peterson, R.L.; Kose, V.E.; Zimmerman, J.E.
J. Appl. Phys. 41: 4865-4873; Nov 1970.
- Magnetocardiograms Taken inside a Shielded Room With a Superconducting Point-Contact Magnetometer;
Cohen, D.; Edelsack, E.A.; Zimmerman, J.E.
Appl. Phys. Lett. 16: 278-280; Apr 1970.
- Some Applications of the Josephson Effect;
Kamper, R.A.; Mullen, L.O.; Sullivan, D.B.
NASA-CR-1565; NBS TN 381; Mar 1970.
- Influence of External Noise on Microwave-Induced Josephson Steps;
Kose, V.E.; Sullivan, D.B.
J. Appl. Phys. 41: 169-174; Jan 1970.
- The Josephson Effect;
Kamper, R.A.
IEEE Trans. Electron Dev. ED-16: 840-844; Oct 1969.
- Harmonic Generation and Submillimeter Wave Mixing With the Josephson Effect;
McDonald, D.G.; Kose, V.E.; Evenson, K.M.; Wells, J.S.; Cupp, J.D.
Appl. Phys. Lett. 15: 121-122; Aug 15, 1969.
- Fabrication of Tunnel Junctions on Niobium Films;
Mullen, L.O.; Sullivan, D.B.
J. Appl. Phys. 40: 2115-2117; Apr 1969.
- Cryoelectronics;
Kamper, R.A.
Cryogenics 9: 20-25; Feb 1969.
- Contribution of Thermal Noise to the Line-Width of Josephson Radiation from Superconducting Point Contacts;
Silver, A.H.; Zimmerman, J.E.; Kamper, R.A.
Appl. Phys. Lett. 11: 209-211; Sep 15, 1967.
- Millidegree Noise Thermometry;
Kamper, R.A.
Proc., Symp. Physics of Superconducting Devices (ONR report); Charlottesville, VA; Apr 1967.

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